CHRISTCHURCH SEXUAL HEALTH AND WELLBEING STUDY: EXPLORING PATTERNS OF SEXUAL HEALTH, KNOWLEDGE, ATTITUDES AND BEHAVIOUR AMONG A SAMPLE OF ADULTS

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Master of Health Sciences

By

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Abstract

To date, only one national study has examined patterns of adult sexual knowledge, attitudes and behaviour in New Zealand in the hope of improving sexual and reproductive health outcomes for all New Zealanders. This study was performed nearly two decades ago. The aim of this study is to explore current patterns of sexual health and wellbeing among a sample of adults from the Christchurch metropolitan area. Seven hundred and sixty seven participants were selected from the General and Maori electoral registers and invited to participate in an Internet-based self-administered anonymous survey. Data was collected on sexual health, knowledge, attitudes and behaviour and compared to five previous national studies in adult sexual health and wellbeing. Twenty-five men and 17 women responded to the survey. Overall, sexual health and wellbeing behaviours reported in this study are higher than those found in the five comparative studies. However, it is not clear whether this finding is an accurate reflection of the current sexual and reproductive health status of the sample population or whether participation bias has overestimated the rate of behaviours in question. In conclusion, the results from this study provide sufficient motive to continue on researching a possible shift in patterns of adult sexual health and behaviour over the last two decades in New Zealand.

List of Abbreviations

AIDS - Acquired Immune Deficiency Syndrome

ABS - Addressed-based sampling

ASHR - Australian Study of Health and Relationships

BBV - Blood-borne virus

CSA - Child sexual abuse

CSHWS - Christchurch Sexual Health and Wellbeing Study

FPCs - Family Planning Centres

HIV - Human Immunodeficiency Virus

HPV - Human Papilloma Virus

ICD - International Classification of Diseases

KAB - Knowledge, attitudes and behaviours

MOH - Ministry of Health

NATSAL - National Survey of Attitudes and Lifestyles

NHSLS - National Health and Social Life Survey

NSSHB - National Survey of Sexual Health and Behaviour

NZPR - New Zealand Partner Relations survey

PAHO - Pan American Health Organisation

RDD - Random digit dialling

SHCs - Sexual Health Clinics

STIs - Sexually Transmitted Infections

SYHCs - Student Youth Health Clinics

U.S. - United States

CHAPTER ONE

Introduction

It is difficult to think of a topic that generates more discussion and controversy than the topic of sex. Human sexuality has long fascinated both laypersons and academics. The impetus for this thesis dates back to 2001, when I was completing an undergraduate degree in Psychology extramurally through The Open Polytechnic of New Zealand. I realised early on that there was a dearth of research on adult sexuality within the current New Zealand context. At this point, with little knowledge of research methods, I set out to develop a questionnaire on sex. The initial framework used for the questionnaire was taken from the chapters of a textbook on human sexuality. The process of developing the questionnaire for use in this study has been an arduous one, lasting more than eight years, with countless revisions.

In 2009, after much delay I decided to pursue my dream; to conduct research into adult sexuality. I enrolled into the Master's in Health Sciences (thesis component) programme and set about investigating patterns in sexual health, knowledge, attitudes and behaviour in Christchurch adults with the hope of updating the extant knowledge on adult sexuality within the New Zealand context. A public health theoretical framework, similar to that used by

the Office of the Surgeon General and the U.S. Department of Health and Human Services (2001) in their publication titled "The Surgeon General's Call to Action to Promote Sexual Health and Responsible Sexual Behaviour", has been used in the production of this thesis. More detail on the public health approach is provided in chapter six.

Chapter two focuses on providing definitions of the key concepts found within the field of sexual health, meanwhile chapter three provides a concise account of the major developments occurring within the field of human sexuality over approximately the last three thousand years. Chapter four gives a brief review of the surveys conducted thus far on human sexual health, knowledge, attitudes and behaviour, providing more in-depth descriptions of five non-probability surveys conducted in the United States, United Kingdom, Australia and New Zealand which will be enable comparison with the findings of this study. Chapter five briefly discusses the New Zealand Sexual and Reproductive Health Strategy (Ministry of Health, 2001) and its role in guiding sexual health policy and practice in New Zealand. It also provides a snapshot of the current state of sexual and reproductive health in New Zealand using the most recent figures. Chapter six discusses the significance of this study, describes the public health theoretical framework used in the production of this thesis and gives a succinct account of the methods behind this study

including participant selection and questionnaire development. Chapter seven highlights some of the major findings in this study. Chapter eight discusses these major findings in relation to prior research, identifies some of the limitations of the current study and concentrates on the potential future direction of sexual health research within the New Zealand context.

It appears that sexual health policy development in New Zealand has lost traction over the last decade. For instance, the Ministry of Health (MOH) website for sexual and reproductive health contains useful information on sexually transmitted infections (STIs), health and safety for sex workers and their clients, pregnancy and general sexual health. It also provides a summary of campaigns and initiatives that attempt to reduce harmful sexual behaviours. However, it has been nearly three years since any updates have been made on the site. Furthermore, since the National party were elected to Government in 2008 the proposed national sexual health survey has been placed 'on hold' (Personal communication with a MOH representative). Recently, the National-led Government decided to cut $8 million from sexual health programmes that aim to reduce the further spread of Chlamydia among high risk groups (e.g. youth). This has been met with severe criticism from the Labour party who believe that not investing in a suitable prevention programme now will lead to greater treatment costs in the long term (New Zealand Labour Party, 2011).

To compound all this, learning opportunities within the area of sexual health or human sexuality are lacking at New Zealand universities when compared to universities in the United States, Australia, the United Kingdom and Canada (Kinsey Institute for Research in Sex, Gender and Reproduction, Inc., 2011a). Only The University of Auckland offers papers at graduate level in sexual health delivered by the School of Population Health. These are not offered every year and are restricted mainly to those working within the health and allied health professions (The University of Auckland, 2011a). The University of Canterbury offers a graduate paper titled 'The Policies and Politics of Sex' that looks at the social cultural construction of sexuality and the regulation of sexuality in New Zealand (University of Canterbury, 2011a). At undergraduate level, a limited number of papers are offered in human sexuality. These papers examine human sexuality mainly from a biological or socio-historical perspective (The University of Auckland, n.d.; University of Waikato, n.d.; Victoria University of Wellington, n.d.).

In contrast, several universities in the United States, Australia, the United Kingdom and Canada have specialist graduate programmes in sexual health, human sexuality or sexology (Kinsey Institute for Research in Sex, Gender and Reproduction, Inc., 2011a). For example, the Kinsey Institute for Research in Sex, Gender and Reproduction, Inc. (2011b) at Indiana University offers a

PhD minor in human sexuality. In Australia, the graduate sexology programme at Curtin University has received international recognition, being awarded the World Association for Sexual Health 'Award for Excellence & Innovation in Sexuality Education' for 2007 (Curtin University, 2011). It is programmes like the ones mentioned here that prepare individuals to work effectively in the development of evidence-based sexual health policy and practice.

Lastly, ongoing research into adult sexual health and behaviour is critical to guiding policy and practices to improve the sexual and reproductive health status of adults. This thesis represents a small-scale effort in updating the existing literature on adult sexual health and behaviour within New Zealand. My hope is that the findings from this study stimulate respectful, thoughtful and mature discussion and research on the promotion of sexual and reproductive health and responsible sexual behaviour in our communities and homes.

CHAPTER TWO

Sexual Health and Wellbeing: What is this?

To date, universally accepted definitions for a number of key concepts within the field of sexual health research are lacking. Several attempts have been made in the last three decades to come to a consensus on definitions for the terms sex, sexuality, sexual health and sexual rights. The following working definitions for sex, sexuality, sexual health and sexual rights appear to have received support from experts from within the field (World Health Organisation, 2006)[1].

2.1 Definitions of Key Concepts within the Field of Sexual Health

Sex:

Sex refers to the biological characteristics that define humans as female or male. While these sets of biological characteristics are not mutually exclusive, as there are individuals who possess both, they tend to differentiate humans as males and females. In general use in many languages, the term sex is often used to mean "sexual activity", but for

[1] These working definitions were developed through a consultative process with international experts beginning with the Technical Consultation on Sexual Health in January 2002. They reflect an evolving understanding of the concepts and build on international consensus documents such as the 1994 International Conference on Population and Development Programme of Action and the 1995 World Conference on Women – Beijing Platform for Action. These working definitions are offered as a contribution to advancing understanding in the field of sexual health. They do not represent an official position of WHO.

technical purposes in the context of sexuality and sexual health discussions, the above definition is preferred (World Health Organisation, 2006, p. 5).

Sexuality

Sexuality is a central aspect of being human throughout life and encompasses sex, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy and reproduction. Sexuality is experienced and expressed in thoughts, fantasies, desires, beliefs, attitudes, values, behaviours, practices, roles and relationships. While sexuality can include all of these dimensions, not all of them are always experienced or expressed. Sexuality is influenced by the interaction of biological, psychological, social, economic, political, cultural, ethical, legal, historical, religious and spiritual factors (World Health Organisation, 2006, p. 5).

This latest definition of sexuality represents a slight variation of an earlier definition provided by the Pan American Health Organisation (PAHO) Regional Office of the WHO (2000) and a complete overhaul of the World Health Organisation's 1986 definition of sexuality (Langefeldt & Porter, cited in Coleman, 2002). The rapid social, economic and political change witnessed

internationally over the last 20 years has probably played a part in the forever-evolving definition of sexuality.

Sexual Health

Sexual health is a state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected and fulfilled (World Health Organisation, 2006, p. 5).

Sexual Rights

Sexual rights embrace human rights that are already recognised in national laws, international human rights documents and other consensus statements. They include the right of all persons, free of coercion, discrimination and violence, to:

- the highest attainable standard of sexual health, including access to sexual and reproductive health care services;
- seek, receive and impart information related to sexuality;
- sexuality education;

- respect for bodily integrity;
- choose their partner;
- decide to be sexually active or not;
- consensual sexual relations;
- consensual marriage;
- decide whether or not, and when, to have children; and
- pursue a satisfying, safe and pleasurable sexual life (World Health Organisation, 2006, p. 5)

Wellbeing

Currently, the use of the term wellbeing appears to be growing in popularity within several disciplines, which include Psychology, Health Sciences, Sociology and Anthropology. However, there appears to be no universally agreed upon definition for the concept (de Chavez, Backett-Milburn, Parry & Platt, 2005; Kiefer, 2008). Sixsmith et al. (cited in Kiefer, 2008) suggests that wellbeing can be defined in terms of an individual's physical, mental, social and environmental status with each aspect interacting with the other and each having different levels of importance and impact according to each individual. An integrative review of the literature on wellbeing by Kiefer (2008) highlights the complexity of this concept. Thus,

with respect to this study wellbeing refers to all factors that influence or can be influenced by sex, sexual health and sexuality.

This chapter has highlighted the changing nature of several key concepts within the field of sexual health. Importantly, there appears to be growing consensus on the definitions for sex, sexuality, sexual health and sexual rights.

CHAPTER THREE

Brief History of Sex Research

The aim here is not to provide an exhaustive account of the history of sex research, but rather to illuminate the major developments that have taken place over the centuries within this growing field of academic enquiry. This brief history cannot do the field of sexuality research justice, particularly the scholars who have devoted their lives to the advancement of human sexuality as a respected discipline. Thus, I urge those who wish to learn more about the history of sex research to visit the Magnus Hirschfeld Archive for Sexology, Humboldt University of Berlin website, which is regarded as the leading online resource on human sexuality worldwide (www2.hu-berlin.de/sexology/index.htm).

3.1 Human Sexuality Research in Ancient Times

Importantly, little is known definitively about sexual behaviour in ancient times (Berman, Berman & Bumiller, 2005). It appears that our earliest accounts of sex originate from Mesopotamia, where 'Venus statuettes' were commonplace. These were carefully carved statuettes with exaggerated female secondary sex characteristics, for example breasts, hips and buttocks. They

depicted the female body as powerful for its potential fertility and nourishment (Byer, Shainberg, Galliano, Shriver & Shriver, 2001).

Several other views of sexuality have prevailed in ancient times. In ancient Egypt, monogamy was the rule, marriage between siblings took place, particularly amongst royalty, non-procreative sex was recognised and contraceptive technology such as the insertion of crocodile or elephant faeces into the vagina or tampons made of honey were created. An alternative view of sexuality prevailed amongst the ancient Hebrews of the Middle East; one where an emphasis was placed on procreative sex and proscription against any sexual expression that was not for reproductive purposes. Amongst Islamic cultures, it was necessary to control the dangerous and insatiable female sexuality. Furthermore, public interactions between men and women were prohibited. In Asia, sex has traditionally been associated with spirituality. Specifically, in Taoism sex is seen as a sacred duty that could lead to immortality. In ancient Greek society most sexual activities, procreative or not were tolerated as long as they did not impact negatively on the family. During this period women had few rights and were typically confined to their homes to bear children. Lastly, among ancient Christians sex was viewed as inherently shameful (Byer et al., 2001).

Historically, for the large part of the last two millennia, particularly in Western society sexual attitudes and the field of sex research have been influenced by the work of St. Augustine. St Augustine (354-430) had probably the most negative attitude towards sexuality of all the 'Church fathers'. He believed that the ideal Christian life was one of celibacy, but recognised that not all people could attain this ideal, which is why he believed God tolerated marriage. According to Augustine, the only purpose for sex within marriage was for procreation. All other activities were deemed sinful. He also taught that the only proper position was in sexual intercourse was with the woman on the bottom and that the only correct act was one where the penis penetrated the vagina. Lastly, Augustine condemned both oral-genital sex and masturbation either done alone or with others (Bullough, 1994).

3.2 Human Sexuality Research during the Early Twentieth Century

During the early years of the twentieth century three men dominated the field of sex research: Magnus Hirschfeld (1868-1935), Havelock Ellis (1859-1939) and Sigmund Freud (1856-1939). Magnus Hirschfeld was a physician and openly homosexual. Although, Magnus Hirschfeld's early years were devoted to political propaganda of homosexuality, he eventually become a prominent researcher into human sexuality (Bullough, 1994). Magnus Hirschfeld devoted several decades to developing and modifying a theory of

the causes of homosexuality. However, he never succeeded in coming to a satisfactory formulation because none of what he stated could really be proven. Importantly, shortly after 1900 Hirschfeld developed a 130-item psychobiological questionnaire that he administered to over 10,000 men and women, the findings of which prompted Hirschfeld to believe that love and sexual attraction was controlled by some form of internal secretions, what we now know as hormones. Again, scientific support for this claim was lacking at the time. In 1919 he opened the first institute for sexual research in Berlin, which housed his library of over 20,000 volumes and 35,000 pictures that supported his research. Unfortunately, most of the works in this library were destroyed by Nazi hoodlums on May 6, 1933. Another notable triumph by Hirschfeld was his role in the international sexology movement, with the first ever international sexology congress in Berlin in 1921, called the International Conference of Sexual Reform Based on Sexual Science. The theme of the conference was the importance of internal secretions for human sexuality, but papers presented from the 36 speakers were wide ranging and did not always fit with the theme of the conference. Out of this meeting came the World League for Sexual Reform. Four further congresses of the World League for Sexual Reform were held between 1921 and 1932, with Hirschfeld being the keynote speaker in four of them. Unfortunately, the rapid decline of the German sexology movement and strong differences between two of the co-

presidents of the League meant that the congress in 1932 would be the last, with the ultimate result being dissolution of the league (Bullough, 1994).

Havelock Ellis, a British-trained physician and sexologist, devoted much of his career to de-stigmatising variations in sexual behaviour, gaining greater contraceptive information, marriage reform and rights for women and sexual minorities. His Studies in the Psychology of Sex (1896-1928) highlighted the concept of the individual and cultural relativism in sex. Ellis was a strong proponent of female sexuality, more so than any of his predecessors. He argued and demonstrated that the long held Victorian belief that women lacked any sexual emotions was without empirical foundation. Furthermore, Ellis highlighted that there were several key differences in male and female sexual impulses. When compared to men the sexual impulse in women was: (1) more passive, (2) more complex and less spontaneous, (3) the impulse grew in strength after the sexual relationship was established, (4) the threshold of excess was more difficult to attain, (5) the sexual sphere was larger and more diffused, (6) there was more periodicity, and probably most importantly, (7) more variation both among women and within a single woman (Ellis cited in Bullough, 1994).

Sigmund Freud, the father of psychoanalysis was an Austrian-born physiologist and physician. Much of Freud's work was directed towards the

link between psychological disturbances and sexuality, although much of it lacked an empirical validation. Freud's contributions to the field of human sexuality during the late 1800s and early 1900s were substantial. These included identifying the power the unconscious drive has in influencing psychopathology, creating one of the earliest theories on human psychosexual development, pushing the notion that both nature and nurture play a part in human sexual behaviour, but probably the most significant was that his writings, more so than any of his predecessors or contemporaries, broke down the barriers against the discussion of sex (Bullough, 1994).

3.3 Human Sexuality Research in Modern Times

Alfred Kinsey, an American-born professor in zoology revolutionised the field of sex research. From 1938 onwards Kinsey and his team of researches collected over 18,000 interviews from men and women throughout the United States with the aim of describing individual and group variations in human sexual behaviour using objective methods. Information, called 'histories' covered social and economic data, physical and physiologic data, marital histories, sexual outlets, heterosexual histories, and homosexual histories. These two volumes of data provided the most in-depth account of human sexuality to date (Kinsey, Pomeroy & Martin, 1948; Kinsey, Pomeroy, Martin & Gebhard, 1953).

In 1966 William Masters and Virginia Johnson from the University of Washington had their seminal work on the anatomy and physiology of the human sexual response cycle published. The research population used in their investigation of the human sexual response comprised of 382 females and 312 males. Importantly, the techniques of defining and describing the changes across the human sexual response cycle were those of direct observation and physical measurement of couples engaging in sexual intercourse within the laboratory. A true and accurate count of the number of male and female sexual response cycles experienced by the participants in the investigation was not recorded, but a conservative estimate of 10,000 complete cycles of sexual response for the total research population could be supported. Masters and Johnson were able to identify four distinct phases in the sexual response cycle, which applied to both males and females: (1) the excitement phase characterised by the build-up of sexual tension within the body, (2) the plateau phase characterised by an extreme level of sexual tension within the body, (3) the orgasmic phase characterised by a release of sexual tension, and finally the (4) the resolution phase characterised by a return to a either a relaxed or semi aroused state (Masters & Johnson, 1966).

More recently, several key figures have made notable contributions to the field of sexual health. These include the now deceased Helen Singer Kaplan,

who was regarded by many as a pioneer in the field of sex therapy (e.g. Kaplan, 1974; Saxon, 1995); Beverly Whipple, a Professor Emeritus at Rutgers University in New Jersey and a pioneer in women's health issues and the sexual physiology of women (e.g. Whipple, Koch, Moglia & Samuels, 2003); Irwin Goldstein, Director of Sexual Medicine at Alvarado Hospital in San Diego, California and world renowned expert in urology and sexual dysfunctions (Goldstein, 2009); and most recently Drs Jennifer Berman M.D., a urologist and internationally renowned expert in the field of female urology and female sexual medicine (e.g. Berman et al., 2005), and her sister Laura Berman Ph.D., world renowned sex and relationship expert and an assistant clinical professor of Obstetrics and Gynaecology, and Psychiatry at the Feinberg School of Medicine at Northwestern University (e.g. Berman, 2010).

3.4 Human Sexuality Research in New Zealand

Within the local New Zealand context, sex research over the last century has focused predominantly on the investigation of sexually transmitted infections (STIs) and sexual and reproductive health (Sparrow, 2003). Margaret Sparrow (2003) provides a cohesive description of the major milestones in New Zealand sexual health since 1914. This publication can be found on the New Zealand Sexual Health Society Incorporated website (www.nzshs.org).

Major contributors to contemporary sexual health research in New Zealand have included Professor and Vice-Chancellor of the University of Otago David Skegg, who established the AIDS Epidemiology Group within the University of Otago Department of Preventive and Social Medicine in 1989 (University of Otago, 2009) and specialises in cancer epidemiology, the epidemiology of HIV/AIDS, contraceptive safety and reproductive health (e.g. Skegg & McCredie, 2002); Associate Professor Nigel Dickson who is the current director of the AIDS Epidemiology Group and specialises in the epidemiology of HIV/AIDS and sexual behaviour (e.g. Dickson, van Roode & Paul, 2005); Emeritus Professor Charlotte Paul who is also a researcher within the AIDS Epidemiology Group and specialises in the epidemiology of HIV/AIDS, contraception and women's' sexual and reproductive cancers (e.g. Paul, van Roode, Herbison & Dickson, 2009); Dr Edward Coughlan who is the Clinical Director of the Christchurch Hospital Sexual Health Department and specialises in researching STIs, particularly Chlamydia infection (e.g. Sherwood & Coughlan, 2007); Dr Sue Bagshaw who is a senior lecturer (adolescent health) in the Department of Paediatrics at Christchurch School of Medicine and is a primary care physician who has over two decades experience in researching, diagnosing and treating sexual health issues (e.g. Bagshaw, 2006); and finally Dame Margaret Sparrow, a now retired doctor who specialised in the delivery of sexual and reproductive health services from

1969-2005, particularly contraception, treating STIs and performing abortions (Abortion Law Reform Association New Zealand, ALRANZ, 2010; Sparrow, 2010).

There have also been substantial contributions made to the study of sexual knowledge, attitudes and behaviours by several social scientists. These include Mark Henrickson PhD, a registered social worker and senior lecturer at Massey University, whose research interests include human sexuality and sexual identity (e.g. Henrickson, 2008); Virginia Braun PhD, a senior lecturer in Psychology at The University of Auckland whose research interests include the social contexts of STI transmission, female genital cosmetic surgery and sexuality in higher education (e.g. Braun, 2009); Maria Perez-y-Perez PhD, a lecturer in human services at the University of Canterbury whose research interests include the social organisation of sex work and the sociology of sexuality (e.g. Perez-y-Perez, 2009); Sue Jackson PhD, a senior lecturer in the School of Psychology at Victoria University of Wellington whose research interests include young people, gender and sexuality issues, including sexual health (e.g. Jackson & Westrupp, 2010); Garth Fletcher PhD, a professor in the Department of Psychology at the University of Canterbury who specialises in social cognition and intimate relationships (e.g. Fletcher, 2002; Fletcher, Overall & Friesen, 2006), and lastly Peter Davis PhD, a professor of

Sociology, Health and Well-being at The University of Auckland who played a leading role in the development of the first and only national probability survey into adult sexual knowledge, attitudes and behaviour conducted in 1991 (e.g. Davis, Yee, Chetwynd & McMillan, 1993).

This chapter has provided a concise summary of the major developments that have taken place within the field of sex research over approximately the last 3,000 years. Importantly the field has progressed somewhat, particularly in the last 100 years, where advances in both science and medicine have provided the requisite tools and methods to uncover many of the mysteries surrounding human sexuality.

CHAPTER FOUR

Surveys on Sexual Health, Knowledge, Attitudes and Behaviours: A Brief Review

Surveys of adult sexual knowledge, attitudes and behaviours (KAB) have been carried out for over a century (Bullough, 1994). The majority of these studies have employed a non-probability sampling design, which has meant that making inferences to the wider population has not been possible. However, recently the methodology of adult sexual KAB surveys has improved and many reputable studies nowadays utilise a probability sampling design, which allows generalisations to be made to the wider population. It is these studies that will be the focus of this chapter.

4.1 Studies Employing a Non-Probability Sampling Design

The vast majority of studies on sexual knowledge, attitudes and behaviour have employed a non-probability sampling approach, which has prevented generalisability of the findings to wider population groups. Such studies include the Mosher Survey carried out on 45 women from the early 1890s to 1920 (Degler, 1974), Janus Report (Janus & Janus, 1993), Hite Report on Female Sexuality (Hite, 1976), Hite Report on Male Sexuality (Hite, 1981), and Durex Global Sex surveys (2001. 2002, 2003, 2004,

2005). In fact, Laumann, Gagnon, Michael, and Michaels (1994) go as far as to state:

> Such studies, in sum, produce junk statistics of no value whatsoever in making valid and reliable population projections. Their estimates are very likely to be strongly biased in an upward direction (i.e. overestimating the incidence of certain behaviours) because the samples are highly self-selected on the very variable of interest – specifically, strong interest in sexual matters (pp. 45-46).

This sentiment is echoed by Fenton, Johnson, McManus and Erens (2001) who conclude that studies using non-probability designs have volunteers that are more sexually experienced, sensation seeking and unconventional, and have more relaxed sexual attitudes and behaviours than those selected randomly from the general population.

Worthy of note here is the Durex Global Sex surveys carried out annually since 1996 (Durex, 2001). These surveys have generated a lot of attention over the last decade and have had many of their statistics published in the mainstream media. Interestingly, the 2004 and 2005 surveys had over 300,000 respondents from 41 countries complete the online questionnaire. However, one of the major drawbacks associated with these surveys is the methodology, particularly the sampling design which

precludes inferences to the wider population from being made. Dr Petra Boynton from the University College London offers a concise summary of the major concerns about the Durex Global Sex Survey on her website (www.drpetra.co.uk). These concerns include: the survey is conducted online, which makes it inaccessible to many and not globally representative; developing countries are less likely to be represented; questionnaire development does not appear to be based around any existing evidence; the survey does not appear to have ethics approval; the aim of the survey appears to be product promotion as opposed to an independent study of sexual behaviour; data from the survey is not analysed, only presented as a list of percentages; the results are not published in peer-reviewed journals only on the Durex website; although data is collected annually, analysis is not completed across multiple years to illustrate any changes; data gathered from the Durex surveys are not used by other academics, practitioners or researchers studying sexual health (Boynton, 2006).

Within New Zealand studies of this type have been conducted since the late 1960s and have focused on a number of themes including sexual behaviour, abortion, contraception, sexual violation and sexually transmitted infections (STIs). Many of these studies have had significant methodological shortcomings which include small sample sizes and the use

of non-probability sampling designs (Hill, Crothers & Kirkwood, 1988). Thus, due to the dated nature and the methodological limitations associated with these studies they will not be used as comparative studies for this study.

4.2 Studies Employing a Probability Sampling Design

Surveys of adult sexual KAB employing a probability sampling design have been conducted in a number of countries including the United States (e.g. Laumann et al., 1994; Mosher, Chandra & Jones, 2002), Great Britain (e.g. Johnson et al., 2001; Johnson, Wadsworth, Wellings & Field, 1994; Wellings, Field, Johnson & Wadsworth, 1994; Wadsworth, Field, Johnson, Bradshaw & Wellings, 1993), Ireland (Layte et al., 2006), Finland (Kontula & Haavio-Mannila, 1995), Australia (e.g. Smith, Rissel, Richters, Grulich, de Visser, 2003) and New Zealand (e.g. Davis et al., 1993). It appears that the recent influx of national surveys on sexual KAB over the last two decades has been precipitated by the advent of HIV/AIDS (Davis, Yee & Jacobson, 1996; Layte, Fullerton & McGee, 2003; Smith, Rissel, Richters, Grulich & de Visser, 2003a).

Several approaches have been used to gather information on national patterns of sexual KAB including face-to-face interviews, telephone

interviews and self-administered questionnaires. Many of the national surveys in sexual KAB have used a combination of face-to-face interviews with self administered questionnaires (Layte et al., 2003). To date, national surveys of sexual KAB have provided a rich source of data and information to guide the activities of educators, policymakers and clinicians. The New Zealand Partner Relations Survey (Davis et al., 1993) is probably the most comprehensive study into sexual KAB performed in New Zealand to date. However, it has been nearly two decades since a study of this magnitude has been conducted, which makes it exceedingly difficult to detect whether or not the changing social landscape has resulted in subsequent shifts in patterns of adult sexual KAB.

The aim here is not to provide an exhaustive review of national surveys of adult sexual KAB, but to provide a descriptive review highlighting both the methods used and a canvassing of the findings from the studies chosen to compare with the findings from this study. For the sake of repetition, one useful such study that provides an analytical and integrative review is that by Layte et al. (2003) conducted as part of their scoping study for the Irish survey on sexual knowledge, attitudes and behaviours. The studies to be discussed here are the New Zealand Partner Relations Survey (e.g. Davis et al., 1993), U.S. National Health and Social Life survey (Laumann et al.

1994), British National Survey of Sexual Attitudes and Lifestyles II (Johnson et al. 2001), Australian Study of Health and Relationships (e.g. Smith et al., 2003a) and the U.S. National Survey of Sexual Health and Behaviour (Herbenick, Reece, Schick, Sanders, Dodge & Fortenberry, 2010a).

New Zealand Partner Relations Survey

The New Zealand Partner Relations Survey (NZPR) (e.g. Davis et al., 1993) to my knowledge is the largest and most comprehensive national survey of sexual behaviour ever conducted in New Zealand to date. The NZPR was conducted over a 10-week period in mid 1991 and involved computer-assisted telephone interviews with 2,361 adults aged 18-54 years. It employed a two-stage stratified sampling approach in which households were selected by random digit-dialling, with a single eligible interviewee per household selected. In addition, subsamples of 273 unsuccessful call-backs and 450 refusals were contacted to confirm eligibility. The results of these two sub surveys were used in the calculation of the final response rate, which was 63 percent. Even though the response rate was comparable to other national surveys, the survey did under-represent certain population groups, in particular, males, the young and urban areas. Importantly, analyses of the reasons for refusal revealed that in nearly one third of cases

the interviewer was not given adequate time to explain the purpose of the survey. Also, a further 29 percent told the interviewer they were too busy. Lastly, 21 percent of cases identified the subject matter of the survey as the reason for refusal.

The primary aim of the NZPR survey was to gather accurate information on patterns of sexual behaviour within the New Zealand context and to outline the key features of the New Zealand sexual culture. The areas surveyed included demographic characteristics, sexual behaviour, contraception, sexually transmitted infections, sexual practices, and knowledge and behaviour related to HIV/AIDS (Davis & Lay Yee, 1996).

A description of the findings on early sexual activity, lifetime sexual partners, sexual history and sexually transmitted infections are reported here. The NZPR survey showed little difference between males and females with respect to the median age for first sexual experience (not including intercourse) and first sexual intercourse (which was defined as vaginal, oral or anal sex). The median age for first sexual experience for males and females was 15.4 and 16.2 years respectively, whereas the median age for first sexual intercourse was 18.1 years for males and 18.6 for females. There was also evidence for a cohort effect, with a consistent decline in age of

first sexual experience and first sexual intercourse (Davis & Lay-Yee, 1999).

With respect to lifetime sexual partners, males reported having more partners than females, a median of five partners for males and two partners for females (Davis et al., 1993). The mean number of sexual partners during the previous year was 1.3 for males and 1.0 for females. An analysis performed by Smith (1992) of four national studies reporting similar findings revealed that the most plausible reason for the discrepancy in the number of sexual partners is a reporting bias; that men are over-reporting and women are under-reporting the number of sexual partners and that the discrepancy increases as the reference period increases. Also, approximately one tenth of males (11%) and females (13%) reported no sexual partnership in the last year. Another important finding was that multiple partnerships in the last year were more common in the youngest age groups (Paul, Dickson, Davis, Lay Yee, Chetwynd & McMillan, 1995).

In relation to sexual history, a greater proportion of males than females reported having ever had sexual intercourse with a same sex partner (2.3% vs. 1.8%). Also, a greater proportion of males than females reported having had oral sex (57.1% vs. 50.0%). A similar proportion of males and females

reported having ever had anal sex (7.3% vs. 7.8%) (Davis, Lay-Yee & Jacobson, 1996).

Overall, 8.3 percent of respondents reported ever having a sexually transmitted infection (STI) (Davis & Lay-Yee, 1996). A greater proportion of males than females reported ever having a STI (10.4% vs. 6.3%) (Davis et al., 1996).

U. S. National Health and Social Life Survey

The U.S. National Health and Social Life Survey (NHSLS) was conducted in 1992. The aim of this study was to gather information on the sexual experiences and other social, demographic, attitudinal, and health-related characteristics of adults in the United States. The NHSLS used a multistage area probability sampling approach designed to give each household an equal probability of inclusion. Two samples were obtained: a cross sectional sample comprising of 3,159 respondents and an oversample of 273 respondents intended to increase the number of Blacks and Hispanics in the study, giving a total of 3,432 respondents. Respondents were aged between 18-59 years of age and the overall response rate was 78.6 percent of the 4,369 eligible respondents selected for inclusion in the

study. The mode of data collection was personal interviews and self-administered questionnaires.

The major areas of investigation in this study included sexual practices such as masturbation, frequency of partnered sex, the duration of partnered sex, number of sexual partners in given time periods, vaginal intercourse, oral intercourse, anal sex, homosexual acts, forced sex, childhood sexual abuse. Also, respondents were also asked about their physical health, their history of sexually transmitted infections, marriage, cohabitation, fertility, and attitudes towards premarital sex, the appeal of particular practices such as oral sex. Lastly, demographic information was gathered on age, race, education, political and religious affiliation, income and occupation (Laumann et al., 1994).

A comprehensive description of the findings on masturbation, frequency of sexual practices, the number of sexual partners, first vaginal intercourse and sexual difficulties is presented here. This study found that men were more likely than women to report masturbating. Specifically, 26.7 percent of men and 7.6 percent of women masturbated once a week. Also, 36.7 percent of men and 58.3 percent of women did not masturbate. Of those that did masturbate, 81.5 percent of men and 61.2 percent of women ‘always’ or ‘usually’ have an orgasm when they masturbate.

Importantly, just over half of men (54%) and close to half of women (46%) felt guilty after masturbation. Lastly, the reasons for masturbation were many and varied. The most common reasons for masturbation for men and women were:

- To relieve sexual tension (73% of men and 63% of women)
- For physical pleasure (40% of men and 42% of women)
- Partners unavailable (32% of men and 32% of women)
- To relax (26% of men and 32% of women)
- Go to sleep (16% of men and 12% of women),
- Partner does not want sex (16% of men and 6% of women),
- Boredom (11% of men and 5% of women)
- Fear of STIs/AIDS (7% of men and 5% of women)
- Other (5% of men and 5% of women)

Furthermore, this study identified similar distributions between men and women in relation to frequency of partnered sex in the last 12 months. These are shown in figure 1.

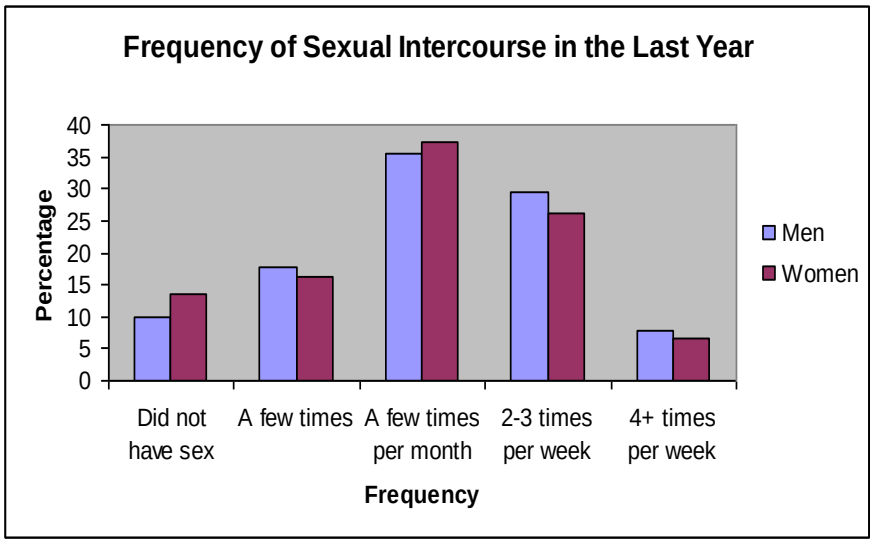

Figure 1. **Frequency of sexual intercourse in the last year, U.S. NHSLS (Laumann et al., 1994)**

With respect to lifetime sexual partners, men were more likely than women to report a higher number of lifetime sexual partners. The distributions of lifetime sexual partners for men and women are shown in Figure 2.

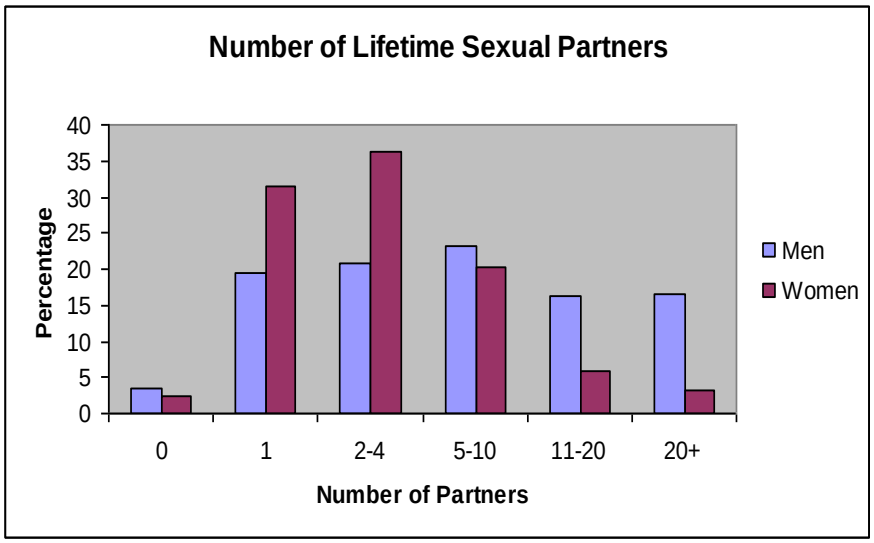

Figure 2. **Number of lifetime sexual partners, U.S. NHSLS (Laumann et al. 1994)**

It was not made clear in this study why the two distributions were asymmetric. Again the discrepancy may be attributed to over-reporting by men and underreporting by women. It is also possible that part of the discrepancy may be accounted for by the notion that men had more male sexual partners than women had female sexual partners. In addition, figure 3 shows the distribution of sexual partners in the last year for men and women. Men reported having more sexual partners in the last year than women.

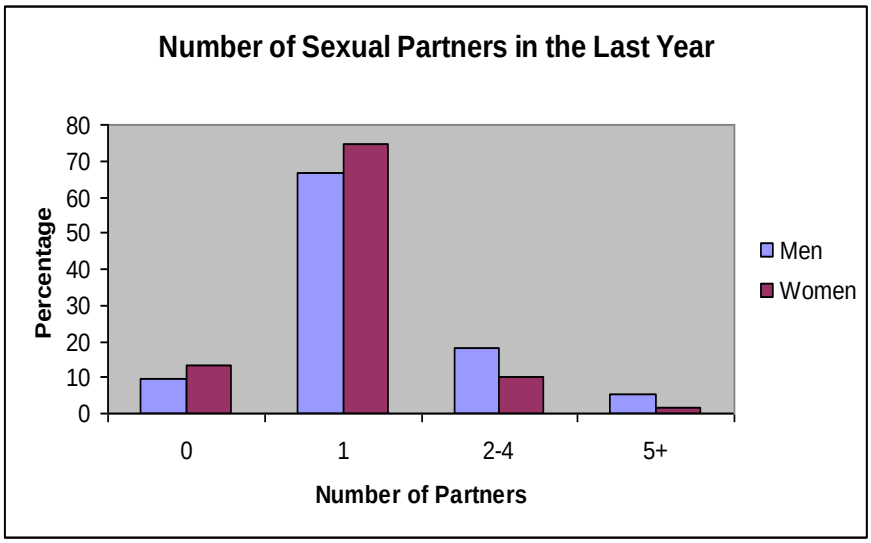

Figure 3. **Number of sexual partners in the last year, U.S. NHSLS (Laumann et al., 1994)**

This study found that women were more likely than men to engage in 'unwanted, but consensual' first vaginal intercourse. First vaginal intercourse was:

- 'Wanted' by 92.1 percent of men and 71.3 percent of women
- First intercourse was 'not wanted, but not forced' by 7.6 percent of men and 24.5 percent of women
- First intercourse was 'forced' for 0.3 percent of men and 4.2 percent of women

Furthermore, the relationship to first sexual partner varied. For instance, women were more likely than men to be married to their first sexual partner. Also, more women than men were 'in love' with their first sexual partner.

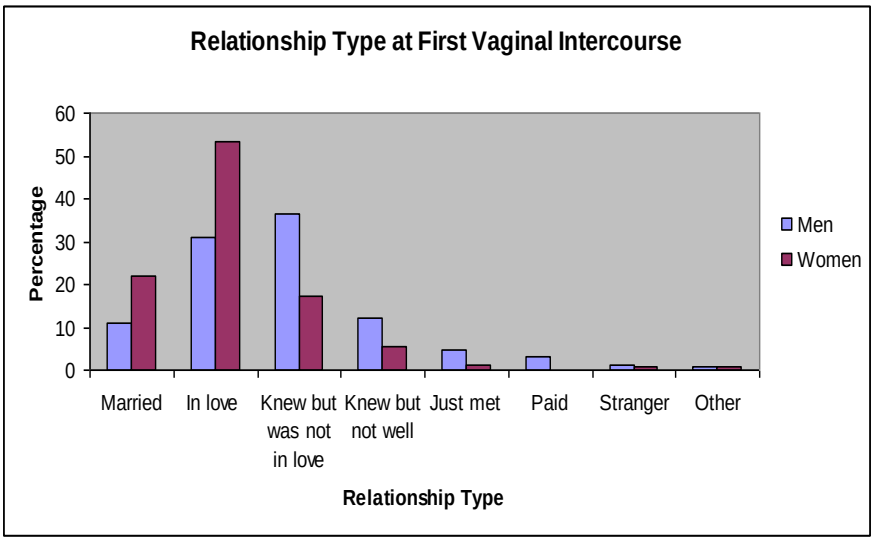

Figure 4. **Relationship type at first vaginal intercourse, U.S. NHSLS (Laumann et al., 1994)**

The relationship types for first vaginal intercourse and their respective distributions for men and women are shown in Figure 4. Lastly, just over one third of men and close to two fifths of women used a method of birth control at first intercourse. Another finding was that self reported sexual difficulties were common among respondents with distinct differences

between men and women. For instance women were more likely than men to report:

- Pain during sex (14.4% vs. 3.0%)
- Sex not pleasurable (21.2% vs. 8.1%)
- Unable to orgasm (24.1% vs. 8.3%)
- Lacked interest in sex (33.4% vs. 15.8%)

Furthermore, men were more likely than women to report:

- Anxiety about performance (17.0% vs. 11.5%)
- Climaxing too early (28.5% vs. 10.3%).

Lastly about one in ten men reported they were unable to keep an erection and close to one in five women reported they had trouble lubricating (Laumann et al., 1994).

British National Survey of Sexual Attitudes and Lifestyles II

The National Survey of Sexual Attitudes and Lifestyles II (NATSAL II) was carried out in Great Britain over a two year period, 1999-2001 using a multistage probability cluster design (Johnson et al., 2001). It was

modelled on the earlier National Survey of Sexual Attitudes and Lifestyles I, 1990-1991 (NATSAL I). The impetus behind NATSAL II was that the results from NATSAL I were becoming outdated. The main objectives of NATSAL II were to: (1) provide a comprehensive picture of patterns of sexual behaviour in Britain, (2) provide data for HIV/AIDs projections in Britain, (3) assess whether there had been changes in Behaviour since NATSAL I, and (4) measure the prevalence of chlamydia trachomatis infection, via urine samples. NATSAL II incorporated advances in methodology by using computer-assisted personal interview (CAPI) and computer-assisted self-interview (CASI) techniques with the goal of increasing response rates, improving data quality and maximising the disclosure of sensitive behaviours (Economic and Social Data Service, 2001).

Other notable differences between NATSAL I and II were that NATSAL II covered a younger age group (ages 16-44) than NATSAL I (16-59); people living in the Greater London area were over sampled; a boost sample of people from four minority ethnic groups (Black Caribbean, Black African, Indian and Pakistani) was included; new question modules were introduced, for example history of sexually transmitted infections and sexual dysfunctions; and a urine sample was taken from consenting

respondents to test for chlamydia trachomatis (Economic and Social Data Service, 2001).

A total of 11,161 respondents aged between 16 and 44 were interviewed (4,762 men and 6,399 women) on a range of topics including age at first intercourse, homosexual and heterosexual partners, partnership formation, STIs, sexual practices and attitudes, which represented a response rate of 63.1 percent (Johnson et al., 2001).

The findings on heterosexual partners, first intercourse, and sexual practices are presented here. Firstly, men were more likely than women to report a higher number of lifetime sexual partners. Hence, the mean and median number of heterosexual partners was notably higher for men when compared to women, 12.7 vs. 6.5 and 6 vs. 4 respectively. The distributions for both men and women are presented in Figure 5.

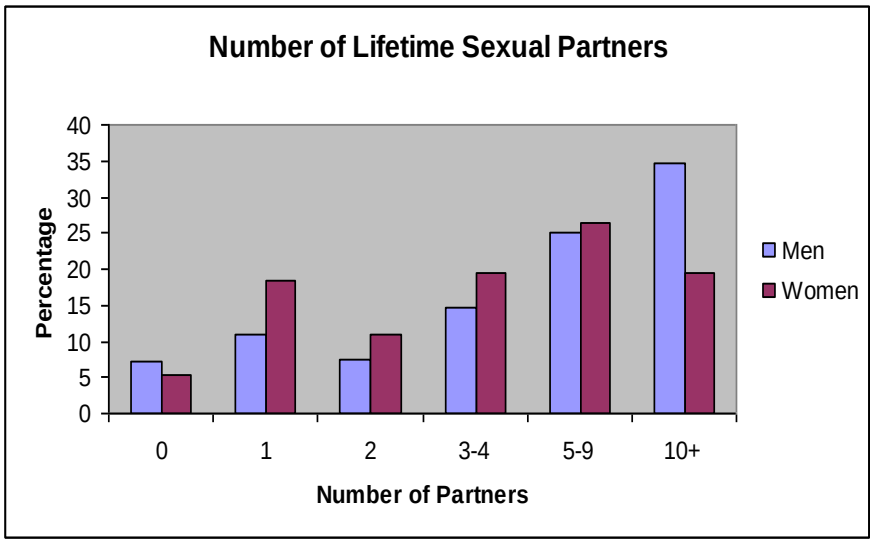

Figure 5. **Number of lifetime sexual partners, U.K. NATSAL II (Wellings et al., 2001)**

Secondly, the median age of first sexual intercourse was 17 for both men and women. More men reported having first sexual intercourse before the age of 16 years (27.4% vs. 20.4%). About half of both men and women used a condom at first intercourse (48.2% and 53% respectively). An additional 22.7 percent of men and 26.1 percent of women used the contraceptive pill. Over a fifth of all respondents (23.0 % of men and 21.9% of men) did not use any form of contraception at first intercourse (Wellings, Nanchahal, Macdowall, McManus, Erens, Mercer, Johnson, Copas, Korovessis, Fenton & Field, 2001).

In relation to sexual practices, more men reported having ever had sexual intercourse outside a primary relationship (14.6% vs. 9.0%). Also, 5.4 percent of men and 4.9% of women had reported ever having a same-sex partner. Approximately three quarters of all respondents (78.1% of men and 76.9% of women) had engaged in oral sex in the last year. Only 12.3 percent of men 11.3 percent of women reported having anal sex in the last year (Johnson et al., 2001).

Australian Study of Health and Relationships

The Australian Study of Health and Relationships (ASHR) (e.g. Smith et al., 2003a) is the largest and most comprehensive survey into sexuality ever undertaken in Australia. The ASHR was a representative population-based survey employing a stratification sampling approach. Computer-assisted telephone interviews (CATI) were performed during 2001-2002 with 19,307 respondents (10,173 men and 9,134 women) aged 16-59 years from all states and territories. The overall response rate was 73.1 percent (69.4 percent among men and 77.6% among women), which compares favourably with other population-based national studies on sexual KAB. There was over-sampling of men and women from non-metropolitan areas in Queensland, New South Wales, Victoria, two non-metropolitan areas of Western Australia and within the catchment of the Central Sydney Area

Health Service. The aims of the ASHR were to: "(1) conduct a representative national population-based prevalence study of the sexual health of Australian adults, (2) identify the frequency and extent of STI and HIV risk practices including the social, demographic and behavioural characteristics associated with these, and (3) identify attitudes and current levels of knowledge on STIs and HIV/AIDS" (Smith et al., 2003a, p. 107). Respondents in this study were asked about their sexual identity, sexual history, opposite-sex sexual activity, same-sex sexual activity, masturbation and other solo sexual activity, sexual coercion, sexual difficulties, contraceptive practices, sex work, health, STI history, and attitudes related to sexuality (Smith et al., 2003a).

The key findings on first vaginal intercourse, sexual difficulties, condom use and failure, pregnancy and sexual coercion are reported here. The overall median age for first vaginal intercourse for men and women was 17 and 18 years respectively. More importantly, the median age of first vaginal intercourse has declined over time. For men, the median age at first intercourse declined from 18 years among men aged 50 to 59 years to 16 years for men aged 16 to 19 years. For women the decline in median age was from 19 to 16 years. Overall, no contraception was used by 37.5 percent of men and 27.2 percent of women. However, over time more

respondents reported use of some form of contraception during first occasion of vaginal intercourse, from 17.0 percent of men and 34.6 percent of women who first had sex in the 1950s to 90.2 percent of men and 94.8 percent of women who first had sex in the 2000s. The same pattern has emerged for condom use during first intercourse (Rissel, Richters, Grulich, de Visser & Smith, 2003b).

There were several notable differences between men and women when it came to the reporting of sexual difficulties. Women were more likely than men to report a lack of interest in having sex (54.8% vs. 24.9%), being unable to come to orgasm (28.6% vs. 6.3%), not finding sex pleasurable (27.3% vs. 5.6%), physical pain during intercourse (20.3% vs. 2.4%) or worrying during sex about their body looking unattractive (35.9% vs. 14.2%). Men were more likely to report coming to orgasm too quickly (23.8% vs. 11.7%). Men and women were equally likely to have felt anxious about their ability to perform sexually (16.0% vs. 17.0%) (Richters, Grulich, de Visser, Smith & Rissel, 2003a).

Condom use in the last six months was greatest among male respondents who had multiple sexual partners when compared to those who had a regular live-in partner or regular non-live in partner (de Visser, Smith, Rissel, Richters & Grulich, 2003c). Furthermore, lifetime experience of

condom breakage among all men who had ever used condoms was 37.1 percent. Condom breakage experiences in the last year varied somewhat; 20.1 percent of men noticed condom breakage during entry or during intercourse, 16.9 percent of men noticed condom breakage upon withdrawal or on removal of condom, 23.8% noticed any condom breakage, and 18.1 percent experienced condom slippage (de Visser, Smith, Rissel, Richters & Grulich, 2003b).

Over three quarters of women (76.1%) respondents reported being pregnant at least once. Another 15.5 percent reported having experienced difficulty in getting pregnant. About one third of women (33.4%) reported having a miscarriage and 22.6% reported having a pregnancy terminated (Smith, Rissel, Richters, Grulich & de Visser, 2003b).

Overall, 20.2 percent of men and 16.9 percent of women had ever been diagnosed with an STI or blood-borne virus (BBV), such as hepatitis and 2.0 percent of men and 2.2 percent of women had been diagnosed in the last year. Also, 40.7 percent of men and 38.9% of women had ever been tested for HIV (Grulich, de Visser, Smith, Rissel & Richters, 2003b).

Lastly, 4.8 percent of men and 21.1 percent of women had ever been forced or frightened into doing something sexually. Of these only 2.6

percent of men and 8.4 percent of women talked about this with the police (de Visser, Smith, Rissel, Richters & Grulich, 2003a).

U. S. National Survey of Sexual Health and Behaviour

The U.S. National Survey of Sexual Health and Behaviour (NSSHB) (e.g. Herbenick et al., 2010a) was conducted during March-May 2009 using a population-based cross-sectional survey of adolescents and adults via research panels accessed through Knowledge Networks (Menlo Park, CA, USA), which are based on a national probability sample established using both random digit dialling (RDD) and an addressed-based sampling (ABS) frame. Collectively, the sampling frame from which participants are recruited from covers approximately 98 percent of all U.S. households.

A total of 2,172 parents (or legal guardians) reviewed a study description, including the survey and 1,347 (62 percent) consented for their child to be invited to participate. Of 1,347 adolescents contacted electronically 831 responded with 99 percent (N=820) agreeing to participate. In addition, an electronic recruitment message was sent to 9,600 potential adult participants, of whom 6,182 (64 percent) responded, with 82 percent (N= 5,045) agreeing to participate. Thus, from these figures the true response rates for the adolescent group (14-17 years) and adult group (18

years and older) were 37.75 percent and 52.55 percent respectively. The data for this study were collected by Knowledge Networks via the Internet. Respondents who did not have access to the Internet were provided with the hardware and Internet capability by Knowledge Networks to partake in the study (Herbenick et al., 2010).

The aim of the U.S. NSSHB was to assess individual and partnered sexual behaviours in a national probability sample of men and women ages 14-94 years in the hope of providing a detailed description of contemporary American sexual behaviour across the life course (Herbenick et al., 2010a). The areas surveyed included determining monthly, yearly and lifetime prevalence rates for masturbation, vaginal intercourse, partnered noncoital behaviours, anal intercourse and same-sex sexual behaviour (Herbenick et al., 2010a), condom use rates during the most recent partnered vaginal or anal sexual event and over the past 10 vaginal and anal intercourse events (Reece, Herbenick, Schick, Sanders, Dodge & Fontenberry, 2010a), the potential association between female solo and partnered sexual activity in both the past year and 90 days with relationship status and perceived health status (Herbenick, Reece, Schick, Sanders, Dodge & Fortenberry, 2010b), and the occurrence and frequency of sexual behaviours in men and their

associations with relationship status and health status (Reece, Herbenick, Schick, Sanders, Dodge & Fontenberry, 2010b).

Overall, the findings of the U.S. NSSHB indicate that:

One's sexual repertoire varies across different age cohorts, with masturbation relatively more common in young and older individuals and vaginal intercourse being more common than other sexual behaviours from early to late adulthood. Partnered noncoital sexual behaviours (oral and anal sex) also appear to be well established aspects of a contemporary sexual repertoire in the United States (Herbenick et al., 2010a, p. 259).

This chapter has provided a brief descriptive account of surveys into adult sexual knowledge, attitudes and behaviour, highlighting the improvement of survey methodology in recent times, which includes larger samples and the use of random selection to recruit participants. The gender differences that emerged with respect to masturbation, number or lifetime sexual partners, number of sexual partners in the last year, first sexual intercourse, sexual intercourse outside the primary relationship and self-reported sexual dysfunctions were consistent across the studies examined.

CHAPTER FIVE

Profile of Sexual and Reproductive Health in New Zealand

Before a comprehensive description of the methodology of this study is described it is paramount that a brief overview of the New Zealand Sexual and Reproductive Health Strategy (Ministry of Health, 2001) and a snapshot of the current state of sexual and reproductive health in New Zealand be given. Importantly, it is outside the scope of this study to provide a comprehensive analysis of the potential correlates of sexual and reproductive health. Several indicators are provided here using the most up-to-date data available. These include data on sexually transmitted infections, pregnancy outcomes, infertility, sexual dysfunctions, sexual attacks, sexual abuse; and sexual and reproductive health cancers.

5.1 Sexual and Reproductive Health Strategy

The "Sexual and Reproductive Health Strategy: Phase One" (Ministry of Health, 2001) provided the overall direction the then Labour-led Government hoped to take to 'achieve positive and improved sexual health outcomes in New Zealand' (p. iii). The key concerns at the time the strategy was created were: (1) the increasing number of STIs, particularly chlamydia, gonorrhoea

and HIV and (2) the high level of unintended/unwanted pregnancies. Phase one provided the guiding principles and outlines the strategic direction of sexual and reproductive health in New Zealand. These principles include: (i) sexual and reproductive health services as a public health service, (ii) a comprehensive, free, specialist sexual health service close to the community, (iii) sexually transmitted infection control to ensure at risk groups have access to effective education programmes, (iv) disease control of HIV/AIDS as a sexually transmitted infection and (v) an emphasis on effective and available services for Maori, Pacific Peoples and young people should be emphasised (Minister of Health cited in Ministry of Health, 2001). Phase two has seen the development of specific population-specific and problem-specific action plans to address these key concerns. Two such publications are "Sexual and Reproductive Health: A resource book for New Zealand health care organisations" (Ministry of Health, 2003a) and "HIV/AIDS Action Plan: Sexual and Reproductive Health Strategy" (Ministry of Health, 2003b). In essence, these action plans set out the goals, objectives and actions needed to be taken to ensure positive sexual health outcomes for all New Zealanders.

5.2 Sexually Transmitted Infections

Currently, there is no population data on the prevalence of sexually transmitted infections (STIs) in New Zealand, and that many factors affect the

prevalence, ranging from testing methods to health care. In New Zealand surveillance of STIs is based on voluntary data from several different sources including specialist Sexual Health Clinics (SHCs), Family Planning Clinics, (FPCs), Student Youth Health Clinics (SYHCs) and government and commercial laboratories. The laboratory information that is available is for the Auckland, Waikato and Bay of Plenty regions and only includes data for chlamydia and gonorrhoea.

Table 1. **Number of STI diagnoses, clinic visit rates and total clinic visits at SHCs, FPCs and SYHCs, 2008**

Infection	**SHCs Cases**	**Rate* (%)**	**FPCs Cases**	**Rate* (%)**	**SYHCs Cases**	**Rate *(%)**
Chlamydia	4,970	5.9	3,545	1.9	1,056	0.4
Gonorrhoea	910	1.1	180	0.1	64	0.0
Genital herpes (first presentation)	832	1.0	145	0.1	84	0.0
Genital warts (first Presentation)	3,278	4.4	573	0.3	243	0.1
Syphilis	89	0.1	0	-	0	-
Non-specific Urethritis (NSU) (males only)	691	1.9	11	0.1	11	0.0

Table 1. **Number of STI diagnoses, clinic visit rates and total clinic visits at SHCs, FPCs and SYHCs, 2008** cont.

Infection	**SHCs Cases**	**Rate* (%)**	**FPCs Cases**	**Rate* (%)**	**SYHCs Cases**	**Rate *(%)**
STI cases	11,220	13.2	4,454	2.4	1,458	0.6
Total Clinic Visits	84,746	-	185,178	-	242,319	-

*Cases/total number of clinic visits. For NSU the denominator is male clinic visits only. Source: Institute of Environmental Science and Research Ltd. (2009)

Importantly, although SHCs see only a fragment of the population their data provides the most comprehensive source on the epidemiology of STIs in New Zealand (Institute of Environmental Science and Research Limited, 2009). Table 1 provides the number of STI diagnoses in SHCs, FPCs and SYHCs for 2008.

In addition, infection clinic visit rates for the main STIs reported by SHCs have been increasing from 2004 to 2008. For FPCs, infection clinic visit rates have increased significantly for chlamydia from 2004 to 2008, but remained stable for the other STIs. Lastly, for SYHCs infection clinic visit rates have increased for chlamydia from 2004 to 2008, but remained stable for the other STIs over the same period (Institute of Environmental Science and Research Limited, 2009).

As at December 31, 2009, a total of 3,294 people in New Zealand had been diagnosed as having (HIV). There were 151 people diagnosed with HIV through antibody testing in 2009. Seventy-three were infected through sex with other men, 50 (24 men and 26 women) through heterosexual contact, five (all men) through injecting drug use (IJU), three from mother-to-child transmission and two through possible health care related infection overseas. In addition, a further 48 people with HIV infection who had not had an antibody test in New Zealand, had a first viral load test in 2009. These were mostly people who had been previously diagnosed overseas (Ministry of Health, 2010).

There is an ongoing policy debate within area of sexual health about the surveillance and reporting of STIs. It has been recommended that significant modifications be made to the existing STI surveillance system. These include the mandatory reporting of bacterial STIs and collection of ethnicity data (Sherwood & Coughlan, 2007). Recently, the Bay of Plenty District Health Board has implemented 'contact tracing' to try and reduce the spread of STIs in the region. This process involves either urging the infected person to encourage their sexual partners to get an STI test or contacting the partner on their behalf, once contact details are provided with the understanding that their identity will remain anonymous (Bay of Plenty Times, 2011).

5.3 Pregnancy Outcomes

In the December 2009 year, 62,543 live births were registered in New Zealand, down from 64,343 in the December 2008 year. In addition, there were 384 stillbirths in 2009, down from 507 in 2008 (Statistics New Zealand, 2011). As yet there are no reliable statistics available on the number of pregnancies ending in miscarriage. This is because miscarriage is not a notifiable event in New Zealand (Statistics New Zealand, 2003).

In 2008, 17,940 pregnancies were terminated, down from 18,380 in 2007 and the peak of 18,510 in 2003. The general abortion rate was 19.7 abortions per 1,000 women aged 15-44 years in 2008, down from 20.1 per 1,000 in 2007 and lower than the peak rate of 20.8 abortions per 1,000 in 2003 (Statistics New Zealand, 2009a). In addition, a report produced by Statistics New Zealand (2009b) has showed both the number of abortions and the general abortion rate has increased between 1980 and 2007, but the general abortion rate has stabilised since 2002 and remains around 20 per 1,000 women. Two additional findings from this report was an increase in the duration of pregnancy before opting for a termination and an increase in the proportion of women who have had a previous pregnancy terminated. It was also highlighted that there are limitations in comparing international abortion data which is mainly attributed to the differing abortion laws between countries.

For instance, unlike New Zealand several nations, including the U.S., Australia and Canada do not have a national notification system. Where statistics are available, New Zealand (19.7 per 1,000 women aged 15-44 years) is shown to have a similar general abortion rate to Australia (19.3 per 1,000 women) and the U.S (19.4 per 1,000 women) and a slightly lower rate than Sweden (21.0 per 1,000 women) (Statistics New Zealand, 2009b).

Lastly, making comparisons between ethnic groups in New Zealand has been hindered somewhat by the change in the ethnicity question in the 2001 national Census. "Ethnic data from 2002 onwards is based on a new question that aligns with the 2001 Census question on ethnicity. Ethnic data for 2002 onwards is not strictly comparable with ethnic data for earlier years, which is based on single ethnic response" (Abortion Services in New Zealand, 2010, n.p.).

Data gathered prior to 2001 showed that the abortion ratio (number of abortions per 1,000 live pregnancies) increased for European, Maori, Pacific and Asian populations during the 1997-2000 period. The abortion ratio in 2000 for European, Maori, Pacific and Asian populations was 210, 257, 253 and 311 abortions per 1,000 live pregnancies respectively (Statistics New Zealand, 2001). Data gathered post 2001 prevents accurate abortion numbers and rates being calculated for each ethnic group because women are able to identify

with more than one ethnic group. Data collected by the Abortion Supervisory Committee (2009) shows that from 2002 to 2008 the number of abortions for European, Maori and Pacific ethnic groups increased, whereas after an initial spike in 2003 the number of abortions by the Asian ethnic group has returned to 2002 levels in 2008.

5.4 Infertility

Infertility refers to the inability of a couple to conceive despite repeated attempts. Specifically, a couple is deemed as infertile when they have not conceived after 12 months of regular unprotected sexual intercourse. Infertility affects about 20 percent of couples of childbearing age (Fertility New Zealand, n.d). Nearly half of the cases of infertility are the result of female factors, another quarter the result of male factors and a final quarter are unexplained (Hull et al., 1985, cited in Jose-Miller, Boyden & Frey, 2007). Several STIs have been shown to affect fertility if left untreated. These include chlamydia, gonorrhoea, syphilis and human papilloma virus (HPV) (American Fertility Association, 2008; Kramer & Brown, 1984). This has become an important public health issue, but the implementation of suitable public health interventions to reduce the transmission of STIs has been restricted somewhat by political, social and economic barriers (Sherwood & Coughlan, 2007; New Zealand Labour Party, 2011).

5.5 Sexual Dysfunction

In general, sexual dysfunction refers to a persistent disturbance in sexual functioning resulting in personal distress and interpersonal difficulty (American Psychiatric Association, 1994). "Sexual dysfunction includes desire, arousal, orgasmic and sex pain disorders" (Phillips, 2000, p. 127). The International Classification of Diseases – 10 (ICD-10) has developed general criteria for the presence of a sexual dysfunction. They are:

- The subject is unable to participate in a sexual relationship as he or she should wish.
- The dysfunction occurs frequently, but may be absent on some occasions.
- The dysfunction has been present for at least six months.
- Not entirely attributable to any of the other mental and behavioural disorders in ICD-10, physical disorders (such as endocrine disorder) or drug treatment (World Health Organisation, 1992, n.p.).

At present, to my knowledge, there is no national prevalence or incidence data on sexual dysfunctions in New Zealand. A U.S. data estimates that 43

percent of women and 31 percent of men have a sexual dysfunction (Laumann et al., 1999).

5.6 Sexual Violence against Adults

Research into sexual violence against adults in New Zealand has increased within the last five years. It appears that the surge in research was precipitated by the creation of The Taskforce for Action on Sexual Violence in July 2007, which was charged with "leading and coordinating efforts to address sexual violence and advise Government on future actions to prevent and respond to this crime" (Ministry of Justice, n.d.). The Treasury (cited in Ministry of Justice, 2009) has estimated that the cost to the New Zealand economy from sexual offending is approximately $1.2 billion per year. Furthermore, sexual violence can lead to a number of negative physical and psychological outcomes that include physical trauma, STIs, depression and post-traumatic stress disorder (Ministry of Justice, 2009). In New Zealand, ACC is charged with paying for the care given to victims of sexual assault or abuse (ACC, 2011).

The 2006 New Zealand Crime and Safety Survey showed that there were just over 200,000 sexual offenses in 2005, which constituted seven percent of all victimisations. More importantly, fewer than one in ten sexual offences are

reported to the Police. Furthermore, the survey found that approximately 29 percent of women and nine percent of men experienced unwanted or distressing sexual contact during their lifetime (Ministry of Justice, 2006). Lastly, there were 2,459 sexual attacks in the 2009 calendar year, 2.2 percent more than in 2008. Of these 1,523 were resolved (60.4%) (Police National Headquarters, 2010).

5.7 Childhood Sexual Abuse

With respect to sexual abuse, the findings from research on the prevalence of child sexual abuse (CSA) varies somewhat. In a cohort study by Fergusson, Horwood & Woodward (2000) the prevalence for any sexual abuse was 18.5 percent (30.4% of females and 6.1% of males), contact sexual abuse was 14.7 percent and 9.3 percent reported attempted or completed sexual intercourse. A community-based study by Anderson, Martin, Mullen, Romans and Herbison (1993) revealed that nearly one in three women reported having one or more unwanted sexual experiences before the age 16 years. A significant number of these experiences involved genital contact (70 percent) and 12 percent of those abused were subjected to sexual intercourse. Furthermore, the abusers were usually known to the victim, being family members in 38.3 percent of the cases and acquaintances in another 46.3 percent. Stranger abuse accounted for 15 percent of all CSA experiences. Most

of the abusers were young men; disclosure of the abuse was uncommon and only seven percent of all the abuse was ever reported to the authorities (Anderson et al., 1993).

In a more recent study by Fanslow, Robinson, Crengle & Perese (2007) 23.5 percent of woman in Auckland and 28.2 percent of women in Waikato reported having been sexually touched or made to do something sexual that they did not want to do prior to the age of 15 years. Significant differences were found between Maori and non-Maori in both regions; Maori having significantly higher rates of CSA than non-Maori. Also, rates in the rural region were significantly higher than rates reported in the urban region. The majority of abusers were male family members of the victims, with uncles being the most frequently reported perpetrator. Lastly, women who had experienced CSA were about twice as likely to have experienced sexual or physical violence by an intimate partner in their lifetime, when compared with women who had not been victims of CSA (54 percent compared with 31 percent; adjusted odds ratio: 2.2, 95 percent confidence interval: 1.8-2.8).

5.8 Sexual and Reproductive Health Cancers

In 2005, breast cancer was the most commonly registered cancer site for females (accounting for 27 percent of female registrations) and was the

leading cause of cancer deaths among females in New Zealand (accounting for 17.1 percent of female cancer deaths). In 2005 the age-standardised registration rate for cancer of the breast was 92.0 per 100,000 female population. This was five percent greater than the 1995 rate (87.5) and four percent greater than the 2004 rate (88.5), but five percent less than the peak in 2000 (97.2). With respect to mortality, the 2005 age-standardised mortality rate was 21.7 per 100,000 females which was nearly 24 percent lower than in 1995. The breast cancer registration rate for Maori, Pacific and non-Maori, non-Pacific groups in 2005 was 102.2, 96.3 and 90.8 per 100,000 females respectively. In addition, the mortality rate for breast cancer in 2005 for Maori, Pacific and non-Maori, non Pacific groups was 29.5, 21.0 and 21.2 per 100,000 females (Ministry of Health, 2009).

In 2005, cancer of the cervix uteri accounted for 1.7 percent of female cancer registrations and 1.4 percent of female cancer deaths. The 2005 age-standardised registration rate was 47 percent less than the 1995 rate (11.6 per 100,000 females). In addition, the age-standardised mortality rate for cancer of the cervix uteri has decreased from 4.6 per 100,000 females in 1995 to 1.9 per 100,000 females in 2005. The cervical cancer registration rate for Maori, Pacific and non-Maori, non-Pacific groups in 2005 was 9.0, 16.3 and 5.6 per 100,000 females respectively. Furthermore, the mortality rate for cervical

cancer in 2005 for Maori, Pacific and non-Maori, non-Pacific was 6.5, 7.1 and 1.4 per 100,000 females respectively (Ministry of Health, 2009).

In 2005, there were 301 registrations of, and 190 deaths from, ovarian cancer. The age-standardised registration rate for ovarian cancer was 10.5 per 100,000 females, while the age-standardised mortality rate was 6.1 per 100,000 females. The ovarian cancer registration rate for Maori, Pacific and non-Maori, non-Pacific groups in 2005 was 5.5, 16.0 and 10.4 per 100,000 females, Also, the mortality rate for ovarian cancer in 2005 for Maori, Pacific and non-Maori, non-Pacific groups was 6.2, 12.0 and 5.9 per 100,000 females respectively (Ministry of Health, 2009).

Prostate cancer was the most common site among males for cancer registrations in 2005, accounting for 25.6 percent of male registrations and the third most common cause of male cancer deaths, accounting for 13.5 percent of male cancer deaths. The age-standardised rate for registrations has declined from 121.8 per 100,000 males in 1995 to 95.0 per 100,000 males in 2005, equating to a 22 percent drop. In addition, the age-standardised mortality rate has declined by 27 percent from the rate of 27.3 per 100,000 males in 1995. The prostate cancer registration rate for Maori, Pacific and non-Maori, non-Pacific groups in 2005 was 74.9, 98.5 and 96.9 per 100,000 males respectively. Also, the mortality rate for prostate cancer in 2005 for Maori,

Pacific and non-Maori, non-Pacific groups was 32.9, 23.2 and 19.3 per 100,000 males respectively (Ministry of Health, 2009).

In the last half century the incidence of testicular cancer has risen dramatically. The average annual age standardised incidence rate increased from 3.7 per 100,000 in 1956 to 9.0 per 100,000 in 1996, a 143 percent increase over the 40 year period. Importantly, approximately 60 percent of this increase was attributable to the growth in population size, but little or none to population ageing. Furthermore, the average age-standardised testicular cancer mortality rate has decreased by over 75 percent between 1972 and 1997, from 1.7 per 100,000 to 0.4 per 100,000. In the latter part of the 1990s Maori experienced a higher risk of developing testicular cancer than non-Maori (Public Health Intelligence, 2002).

The incidence of endometrial cancer has risen steadily from an average age standardised incidence rate of 11 per 100,000 in the 1950s to peak in the mid-1970s at approximately 17 per 100,000. Since then the rate has fallen back to 15 per 100,000 in 1996. With respect to mortality, the average age standardised mortality rate fell from 5 per 100,000 in 1972 to 4 per 100,000 in 1997. During the late 1990s Maori were at greater risk of developing endometrial cancer than non-Maori (Public Health Intelligence, 2002).

This chapter has provided a brief summary of the current state of sexual and reproductive health in New Zealand using the most up-to-date statistics available. It appears from clinic surveillance data that STI rates are on the rise in both males and females, particularly rates of chlamydia. With respect to other indicators, registered births have decreased as has the general abortion rate. Morbidity associated with sexual and reproductive cancers has steadily risen in recent times, whereas mortality rates have declined. Redefining the ethnicity question in the last decade has also meant that making comparisons between ethnic groups is somewhat limited. One final note is that national statistics on several sexual and reproductive health indicators including the incidence of STIs and sexual dysfunctions are lacking, which makes it exceedingly difficult for public health researchers and clinicians to determine the true extent of the problem and respond accordingly.

CHAPTER SIX

Methods

Even though the preceding chapter has provided some insight into the state of sexual and reproductive health in New Zealand, it is apparent that little data exist on the rates of sexual and reproductive health issues within the general population. This chapter will discuss the significance of this research, the Christchurch Sexual Health and Wellbeing Study (CSHWS), provide a succinct account of the public health theoretical framework used in the production of this thesis and will describe in detail the methodology of this study

6.1 Significance of this Study

To reiterate, The New Zealand Partner Relations Survey (Davis et al., 1993) is the most comprehensive study into sexual KAB performed in New Zealand to date. However, it has been nearly two decades since a study of this type has been conducted, which makes it exceedingly difficult to detect whether or not the changing social landscape has resulted in subsequent shifts in patterns of adult sexual KAB within New Zealand. This study represents a small scale effort to obtain a more recent picture of adult sexual

KAB in New Zealand and to see whether the public are receptive to such research being conducted in their locality. Another benefit of population-based studies is that they can provide a fairly good indication of the rates of particular behaviours within the general population, assuming certain prerequisites are met, for instance random sampling and an acceptable response rate, which is typically above 60 percent (Smith, et al., 2003). To my knowledge, this is one of a few studies that employ the use of an online web-based questionnaire to explore adult sexual health, knowledge, attitudes and behaviour in New Zealand.

6.2 The Public Health Approach

The public health approach, sometimes referred to as a population health approach is an approach to health with the objective of improving the health of the entire population and reducing health inequalities among population groups (Public Health Agency of Canada, 2010). It typically consists of four steps: (1) defining the problem: surveillance, (2) identify risk and protective factors; the causes, (3) develop and test interventions, and (4) implement interventions and evaluate their impact and cost-effectiveness (Office of the Surgeon General, U.S. Department of Health and Human Services, 2001; World Health Organisation, 2010).

Step one of the public health approach, identifying the problem, involves collecting information about the magnitude, scope, characteristics and consequences of the public health issue, in this case sexual health. Step two attempts to identify risk and protective factors that shape human sexual behaviour and can have an impact on sexual health and the practice of responsible sexual behaviour. Step three is concerned with developing and testing interventions that improve sexual health and responsible sexual behaviour. Incidentally, several community, school and clinic-based interventions have been evaluated and shown to be effective in improving sexual health and responsible sexual behaviour (Office of the Surgeon General, U.S. Department of Health and Human Services, 2001). Finally, step four involves implementing effective and promising interventions in a wide range of settings, paying particular attention to the effects of these interventions on risk factors that impact on sexual health.

This study focuses on step one of the public health approach, that is to collect information on the magnitude, scope and characteristics of sexual and reproductive health issues within the general population in the Christchurch metropolitan area.

6.3 Participants and Procedure

An anonymous self-administered internet-based questionnaire was carried out between October 2009 and January 2010 on a sample of adults randomly selected from both the general and Maori electoral rolls for the Christchurch metropolitan area. The decision to use this method over others was based mainly on political, economic and social factors. It was believed that due to the sensitive nature of the topic being examined in the study making the survey anonymous may increase the response rate. In addition, time constraints meant that conducting interviews either in person or over the telephone was impractical given the length of the survey.

The metropolitan area in this instance comprises the Christchurch Central, Christchurch East, Ilam and Wigram electorates. Latest statistics compiled by Elections New Zealand (2010), using 2006 census data, estimated that the Christchurch metropolitan population eligible to vote as 203,900 and a total enrolled population as 176,986. The sampling frame from which participants were recruited covers approximately 86.4 percent of the estimated adult (those age 18 years and over) population within the Christchurch metropolitan area. A 95 percent confidence level with a 5 percent margin of error was desired at the outset of the study and it was estimated, from Layte et al.'s (2003) review of 25 national studies into adult

sexual knowledge, attitudes and behaviour that at least 50 percent of those invited would participate in the study. Importantly, none of these studies implemented the use of internet-based questionnaires as a means of collecting data. A study by Kaplowitz, Hadlock & Levine (2004) comparing the response rates of mail and web surveys using students from Michigan State University found that the response rates for five distribution modes varied from around 20 percent for the email survey to 31.5 percent for the mail survey. In addition, a review by Sheehan (2001) of studies using electronic mail (e-mail) to distribute surveys found that response rates to e-mail surveys has declined since 1986 and that two factors exerted the most influence on response rate, (1) the year the survey was performed and (2) the number of follow-up contacts. However, using these studies to estimate the response rate is somewhat limiting because the respondents in this study were not selected from an email list, but rather the electoral roll. More importantly, due to budget constraints only 714 persons and 53 persons were selected from the general and Maori electoral roll respectively using a systematic random sampling approach. These individuals were mailed an invitation to participate in the Christchurch Sexual Health and Wellbeing study, which is located in the appendices under Appendix A. The invitation contained an information sheet that explained several items. These included that the individual had been selected from either the general

or Maori electoral rolls, the aim of the study, the link to follow if they agreed to participate in the study and had access to the Internet, their right to withdraw from the study, a warning on the content of the questionnaire, a brief description of myself, that the study had obtained ethical approval from the University of Canterbury Human Ethics Committee and a list of support services for those seeking additional information or help. A copy of the information sheet is located in the appendices under Appendix B.

6.4 Questionnaire

The rationale behind developing a new questionnaire was that previously validated and published questionnaires were for the large part 'outdated'. The development of the questionnaire used in the current study began in 2002 with the text titled 'Dimensions of Human Sexuality (7th ed.)' (Byer, Shainberg, Galliano, Shriver & Shriver, 2001) providing the initial framework. This literary source was chosen to provide a preliminary framework because it seemed logical to cover all aspects of human sexuality. Initially, the questionnaire covered nearly all the chapters located within this text in a sequential manner. However, after reading the report by Layte, Fullerton & McGee (2003) on the 'Scoping Study for National Survey of Sexual Knowledge, Attitudes and Behaviours' it was decided that the format be changed to one similar to that described in chapter three

of this report. The rationale behind this decision was that Layte et al. (2003) conducted a comprehensive review of previous national surveys into adult sexual knowledge, attitudes and behaviour making sure to tease out key themes to examine. The areas covered in the questionnaire used in the current study were: demographics and general health status, attitudes to sex and relationships, sexual knowledge and education, first sexual experiences, contraception/fertility management and pregnancy, sexually transmitted infections, sexual health, sexual functioning, lifetime sexual activity, current sexual activity (within the last 12 months), and respondent feedback. Lastly, the male and female questionnaires contained 156 and 172 items respectively, but item response was dependent on a respondent's sexual history. The female questionnaire contained more items because it also covered areas exclusive to women, such as the contraceptive pill, pregnancy, and menstruation. The male and female versions of the questionnaire are located in the appendix as appendices D and E respectively.

In mid-2009 after recommendations from the University of Canterbury Human Ethics Committee it was decided that the postal questionnaire option would be removed and that questionnaire would be delivered solely online through the Information Communication Technology Services using

the university's servers. There were several advantages of using this format over other online survey providers which included no direct financial cost of administering the survey online, easier to communicate with the administrators considering they were located on campus and enhanced security.

Due to budget constraints piloting of the questionnaire using a comparable population to that selected for the study was not possible. Thus, piloting was restricted to feedback from a group of my friends, which included a researcher within public health, a sexual health educator, several undergraduate and postgraduate students, trades people and hospitality workers. Feedback from this group on questionnaire length, content, ease of understanding questions was largely positive.

6.5 Ethics

Ethical approval for the Christchurch Sexual Health and Wellbeing Study was obtained from the University of Canterbury Human Ethics Committee on 15 May 2009 on the grounds that several of the recommendations from the Committee were implemented. These recommendations included: the paper-based questionnaire be removed (this recommendation was mandatory if the study was to be approved);

indicating in bold on the information sheet that the questionnaire contained sexually explicit questions that may cause mental and moral or cultural offense; that a list of support services be provided at the end of the invitation letter and information sheet for those seeking additional information or help; and the information sheet needs to make clear what the aim of the survey is. The recommendation to remove the paper-based questionnaire was based on the notion that a person other than the respondent may view the respondent's responses if it was in plain sight. Also, other ethical considerations included making it clear to respondents that they could withdraw from the study up to the point where their data had not been submitted electronically and a description of my background. A copy of the approval letter from the University of Canterbury Human Ethics Committee is located in the appendices under Appendix C.

6.6 Statistical Analysis

Due to the exploratory nature of this study and the low response rate, statistical analyses were restricted to the provision of frequency counts and percentages. Statistics were calculated using IBM SPSS Statistics (version 17). Also, where possible statistics were broken down by gender and analysed accordingly. Confidence intervals for percentages have been omitted due to the small sample who responded, which has resulted in a

rather wide confidence interval. Incidentally, a 95 percent confidence level for this study generated a confidence interval of ±15.12[2]. Lastly, statistics such as a chi square test was not performed because cell sizes were low.

This chapter has provided a succinct account of the significance of this study highlighting that it has been nearly two decades since a population-based study has been conducted on sexual health and behaviour in New Zealand. Furthermore, a brief description of the public health framework used in the production of this thesis has been given, in particular the process used to resolve challenges in public health. Lastly, a description of the methods has illustrated some of the challenges in conducting research of a sensitive nature as is the case with sexual health and behaviour research.

[2] For example if 30 percent answered a particular question, then with 95% confidence we will expect the true response for the population to lie ±15.12 of 30% or between 15% to 45%. The wider the confidence interval the less precision we have with our response estimates for the population from which the sample was drawn

CHAPTER SEVEN

Results

This chapter provides a description of the results on response rate, demographic profile of the sample and general health status, opinions on sex and relationships, sexual knowledge and education, first sexual experiences, contraception, pregnancy, sexually transmitted infections, sexual health, sexual functioning, variations in sexual thoughts and behaviours, lifetime sexual activity, current sexual activity (within the last year) and respondent feedback.

7.1 Response Rate

To reiterate, 767 individuals were selected from the general and Maori electoral roll and were sent a letter inviting them to participate. A total of 42 individuals (25 men and 17 women) ages 19 to 59 years responded. An additional 28 invitations (letters) were returned stating that the recipient of the invitation no longer resided at the address. These 28 returns were deemed ‘out of scope’ since the individual approached was outside the target population. Thus, the total response rate response rate was calculated as follows: the number of valid responses/ (total number invited – out of scope), which gives 42/ (767-28), (5.6%). This was lower than what was

expected, based on the response rates from previous national probability studies into adult sexual knowledge, attitudes and behaviour.

7.2 Demographic Profile of the Sample

There are few differences between men and women with respect to the demographic profile of the sample. The demographic characteristics of the sample are presented in Table 2. The most obvious difference was a greater proportion of women than men reported that their general health status was 'very good' (52.9% vs. 24.0%). Also a greater proportion of men than women reported being either attracted to someone of the same sex (12.0% vs. 0.0%) or both sexes (12.0% vs. 6.0%). The youngest respondent in the sample was 19 years, whereas the oldest respondent was 59 years. The median and mean age of the sample was 43 and 40.18 years respectively, with a standard deviation of 11 years. When comparing it to census data gathered on Christchurch, the current study under-represents women, youth (18-24 years), older adults (65 years and older), lower income households ($30,000 or less per year) and the Asian population which now numbers slightly more than the Maori population in Christchurch (Statistics New Zealand, 2006).

Table 2 **Participant Characteristics** (N = 42)

Characteristics	**Males** N = 25 (59.5%) **N**	**%**	**Females** N = 17 (40.5%) **N**	**%**
Gender				
Men	25	100	—	—
Women	—	—	17	100
Age				
18-24	1	4.0	3	17.6
25-29	4	16.0	2	11.8
30-39	4	16.0	2	11.8
40-49	9	36.0	7	41.2
50-59	6	24.0	2	11.8
Non Response	1	4.0	1	5.9
Ethnicity*				
NZ European	20	80.0	13	76.5
NZ Maori	1	4.0	2	11.8
Other European	1	4.0	2	11.8
Other	4	16.0	—	—
Sexual Orientation				
Attracted to opposite sex	19	76.0	16	94.0
Attracted to same sex	3	12.0	—	—
Attracted to both sexes	3	12.0	1	6.0
Highest Qualification				
None	2	8.0	1	5.9
High School	11	44.0	6	35.3
Undergraduate	9	36.0	6	35.3
Postgraduate	3	12.0	4	23.5
Relationship Status				
Single	7	28.0	4	23.5
Dating	1	4.0	2	11.8
Defacto	4	16.0	6	35.3
Married	11	44.0	5	29.4
Separated	2	8.0	—	—
Annual Household Income				
$30,000 or below	3	12.0	1	5.9
$30,001 - $60,000	9	36.0	7	41.2
$60,001 +	12	48.0	7	41.2
No Response	1	4.0	2	11.8
General Health Status				
Very Good	6	24.0	9	52.9
Good	13	52.0	8	47.1
Fair	5	20.0	—	—
Bad	1	4.0	—	—

* N = 26 due to one male respondent identifying with more than one ethnic group.

7.3 Attitudes to Sex and Relationships

Participants were asked to provide their opinions on a range of topics involving sex and relationships. Some interesting gender differences emerged and these are presented in Table 3.

For instance, a greater proportion of women than men responded that sex before the age of 16 years is 'always wrong' (47.1% vs. 32.0%). Also, a greater proportion of men than women responded that sex with a person without being in love with them is 'not wrong at' (64.0% vs. 29.4%). Lastly, a greater proportion of women than men reported that having sex when you do not know your own or your sexual partner's STI status is 'always wrong' (82.4% vs. 56%).

In this study, respondents were also asked to rate a series of statements on how important they were to a successful relationship or marriage using a five-point scale ranging from 'very important' to 'not important at all'. These are also presented in Table 3. For the large part, the responses from men and women were fairly similar. However, under closer examination a greater proportion of women than men endorsed 'very important' on factors such as sharing household duties (58.0% vs. 16%), faithfulness (94.1% vs. 72.0%),

spending quality time (82.4% vs. 52%) and good communication (94.1% vs. 72.0%).

Table 3. **Opinions on Sex and Relationships** (Men, n=25; Women, n=17)

Question	**Not Wrong at All (%)**	**Sometimes Wrong (%)**	**Almost Always Wrong (%)**	**Always Wrong (%)**	**No Response (%)**
Sex before marriage is…					
Men	80.0	12.0	4.0	4.0	-
Women	82.4	11.8	-	5.9	-
Sex before 16 years is…					
Men	-	48.0	16.0	32.0	4.0
Women	-	29.4	23.5	47.1	-
Sex between consenting adults of the same sex is…					
Men	80.0	8.0	4.0	8.0	-
Women	82.4	11.8	-	5.9	-
Sex with a person without being in love with them is…					
Men	64.0	24.0	-	12.0	-
Women	29.4	58.8	5.9	5.9	-
Being in a relationship and having sex with someone else is…					
Men	16.0	16.0	40.0	28.0	-
Women	11.8	5.9	47.1	35.3	-

Table 3 cont. **Opinions on Sex and Relationships** (Men, n=25; Women, n=17)					
Question	**Not Wrong at All (%)**	**Sometimes Wrong (%)**	**Almost Always Wrong (%)**	**Always Wrong (%)**	**No Response (%)**
Masturbation is…					
Men	92.0	8.0	-	-	-
Women	70.6	23.5	-	5.9	-
Sale of pornography to adults is…					
Men	76.0	20.0	4.0	-	-
Women	35.3	47.1	-	17.6	-
Having sex when you don't know your or your partner's STI status is…					
Men	-	8.0	36.0	56.0	-
Women	5.9	5.9	5.9	82.4	-
Having sex with someone important in an organisation to get a job there is…					
Men	4.0	12.0	16.0	68.0	-
Women	5.9	-	23.5	70.6	-
Having sex with your boss to improve your position in the organisation is…					
Men	4.0	8.0	16.0	72.0	-
Women	5.9	-	17.6	76.5	-
Prostitution is…					
Men	44.0	28.0	16.0	12.0	-
Women	17.6	41.2	17.6	23.5	-
	Strongly Agree (%)	**Agree (%)**	**Not Sure (%)**	**Disagree (%)**	**No Response (%)**
Sexual activity promotes health and well-being					
Men	48.0	40.0	8.0	4.0	-
Women	24.0	58.8	11.8	-	-

Table 3 cont. **Opinions on Sex and Relationships** (Men, n=25; Women, n=17)					
	Very Important (%)	**Fairly Important (%)**	**Neutral (%)**	**Not Very Important (%)**	**No Response (%)**
Making my partner orgasm during sex is…					
Men	44.0	44.0	8.0	-	4.0
Women	35.3	29.4	29.4	5.9	-
		No (%)	**Unsure (%)**	**Yes (%)**	**No Response (%)**
Is the Government doing enough to make free internet porn less accessible to children?					
Men		40.0	32.0	16.0	12.0
Women		58.8	35.3	5.9	-
	No (%)	**Yes (%)**	**Yes, but only in certain situations (%)**	**Not Sure (%)**	**No Response (%)**
Should termination of unwanted pregnancies be allowed					
Men	-	56.0	32.0	12.0	-
Women	5.9%	82.4	5.9	5.9	-

Table 3 cont. **Opinions on Sex and Relationships** (Men, n=25; Women, n=17)					
Question	**Very Important (%)**	**Fairly Important (%)**	**Neutral (%)**	**Not Very Important (%)**	**Not Important at All (%)**
How important is each of the following to a successful or relationship…					
Sharing household duties					
Men	16.0	64.0	20.0	-	-
Women	58.0	23.5	11.8	5.9	-
Faithfulness					
Men	72.0	20.0	8.0	-	-
Women	94.1	5.9	-	-	-
Adequate Income					
Men	8.0	48.0	28.0	16.0	-
Women	11.8	58.8	29.4	-	-
Happy Sexual Relationship					
Men	32.0	48.0	16.0	4.0	-
Women	35.3	64.7	-	-	-
Having children					
Men	-	12.0	60.0	12.0	16.0
Women	-	11.8	58.8	17.6	11.8
Similar tastes and interests					
Men	12.0	44.0	36.0	8.0	-
Women	5.9	41.2	41.2	11.8	-
Physical attraction	32.0	56.0	4.0	8.0	-
Men	23.5	52.9	23.5	-	-
Women					
Spending quality time together					
Men	52.0	40.0	8.0	-	-
Women	82.4	17.6	-	-	-
Tolerance and Acceptance					
Men	68.0	32.0	-	-	-
Women	82.4	17.6	-	-	-
Good communication	72.0	28.0	-	-	-
Men	94.1	5.9	-	-	-
Women					

Lastly, participants were asked to rate a series of behaviours on whether they constituted 'cheating'. Some interesting gender differences emerged. For instance, a greater proportion of women than men considered close contact such as hugging or holding hands with someone other than a primary partner cheating (41.2% women, 28.0% men). Also, a greater proportion of women than men reported that kissing someone other than a primary partner constituted cheating (88.2% women, 56% men). Nearly all men and women surveyed reported that oral intercourse or complete intercourse was cheating.

7.4 Sexual Knowledge and Education

Sexual information can be obtained from a variety of different sources. Respondents were asked where they received their sexual information from during their formative years. The most common sources for both men and women were sexual education at school (72.0% men, 70.6% women), friends (70.6% women, 60.0% of men) and parents (40.0% men, 41.2% women). Also, a greater proportion of men than women reported that they learned about sex through movies (52.0% vs. 29.4%), television (52.0% vs. 17.6%), pornography (52.0% vs. 5.9%) and first sexual partner (56.0% vs. 23.5%). Less common sources of information included siblings, cousins, health professionals (e.g. doctor or nurse), and counsellor or psychologist.

Respondents were also asked a series of questions on the delivery of sexual health education at school. An overwhelming majority of respondents (92.9%) reported that sexuality education should be part of the Health curriculum. Furthermore, over half of respondents (54.8%) reported that sexuality education be taught by the age of 15 years. Participants were asked to recall the sexuality education they received while at school and rate its usefulness. Just over one third of respondents found it either ‘absolutely useful’ or ‘very useful’ (38.1%), close to one fifth found it ‘neutral’ (19.0%) and close to a third found it ‘not very useful’ (31.0%). Finally, participants were provided with a list of sexual health topics and asked whether they should be taught within the sexuality education curriculum at school. The topics with their respective endorsement include:

- Male and female sexual anatomy (90.5%)
- Male and female sexual health (90.5%)
- General human development (88.1%)
- Conception, pregnancy and childbirth (88.1%)
- STIs (85.7%)
- Sexual decision making and pressure (85.7%)

- Contraception (85.7%)
- Biological sexual development (83.3%)
- Sex and alcohol (76.2%)
- Masturbation is not harmful (76.2%)
- Sex and other drugs (71.4%)
- Relationship and communication skills (69.0%)
- Sexual abuse and its effects (64.3%)
- Values (64.3%)
- Rape and its effects (61.9%)
- Intimacy (59.5%)
- Abstinence (59.5%)
- Culture and sexuality (57.1%)
- Sexual orientation and its diversity (52.4%)
- Sexual response cycle (52.4%); love (52.4%)

- Sexual dysfunction (47.6%)
- Abortion (45.2%)
- Gender roles (40.5%)
- Sexuality and disability (35.7%)
- Infertility (31.0%)

7.5 First Sexual Experiences

Sexual experiences vary somewhat among individuals and the onset of interpersonal sexual experiences often follow a natural progression, from non-insertive experiences (e.g. kissing, cuddling, fondling, mutual masturbation) to insertive experiences (e.g. oral sex, vaginal and/or anal sex). Respondents were asked a series of questions on their first sexual experiences. The median debut age for those who had engaged in a heterosexual experience (not including oral, vaginal or anal sex) is 14 years with a range of 9 to 25 years. In addition, the median debut age for those who had engaged in heterosexual intercourse (oral, vaginal or anal sex) is 18 years with a range of 13 to 35 years. Two respondents, both men had not had any sexual experience or sexual intercourse with someone of the opposite sex. Respondents were asked a series of questions on the features of first heterosexual intercourse. Around a quarter

of men and women reported that it was their partner's first time also (24.0% men, 29.4% women), a greater proportion of women than men used contraception (52.9% vs. 44.0%) and a greater proportion of men than women would had consumed alcohol (40.0% vs. 11. 8%). Also, for men first sexual intercourse was more likely to occur either with a friend, as a one night stand or with someone they had just met. For women first sexual intercourse was more likely to have occurred within a stable relationship. Another important finding was that just over a third of women (35.3%) and a close to a quarter of men reported that they should have waited longer before engaging in their first sexual intercourse.

Respondents were also asked about any debut homosexual or same sex experiences they may have had. A total of five women (29.4%) and seven men (28.0%) reported having had a homosexual experience (not including oral, vaginal or anal sex). Also, two women (11.8%) and four men (16.0%) reported having had having had homosexual intercourse (oral, vaginal or anal sex).

7.6 Contraception

Respondents were asked what forms of contraception they had ever used and what they had used in the last year. These responses are presented in table 4. The most common form of contraception ever used by respondents in this

sample is the male condom with the contraceptive injection (Depo-Provera), progestin-only pill, vasectomy and the combination oral contraceptive pill also being popular choices. The high percentage of participants who reported using the withdrawal method as a form of contraception is of particular concern.

Table 4. **Methods of Contraception Ever Used and in the Last Year** (n=42)

Contraception Method	**Ever Used** (%)	**Used in the Last Year** (%)
Fertility Awareness-based Methods		
Calendar or Rhythm Method	14.3	4.8
Basal Body Temperature Method	-	-
Cervical Mucus Method	4.8	-
Sympto-thermal Method	-	-
Barrier Methods		
Male condom	92.9	35.7
Female condom	2.4	-
Diaphragm	11.9	-
Combination Oral Contraceptives	31.0	4.8
Progestin-only Contraception		
Depo-Provera (injection)	67.0	4.8
Progestin-only Pill/Mini pill	50.0	14.3
Sterilisation Methods		
Tubal Ligation	2.4	-
Vasectomy	33.3	33.3
Withdrawal	28.6	11.9
Vaginal Spermicides	7.1	2.4
Intrauterine Device	9.5	9.5
Emergency Contraceptive Pill	26.2	7.1
None	2.4	9.5

*Note: Percentages do not total 100 due to more than one method being used over the specified time periods.

This method of contraception has been found to be associated with higher rates of unintended pregnancy when compared to other more effective contraceptive options such as the combined oral contraceptive pill, intra-

uterine device and male condom (Trussell, 2007). Condom use errors and problems have significant implications in the prevention of STIs and unwanted pregnancy. Participants were asked whether they had ever experienced particular problems with their sexual partner while using a male condom during sexual activity. These results are presented in Table 5. Nearly half of respondents reported decreased sensitivity during sexual intercourse and two fifths reported having the condom come off in their or their partner's vagina.

Table 5. **Condom Use Problems** (n=42)

Experience	**Respondents who reported this** (%)
Decreased sensitivity during sexual intercourse	47.6
Having the condom come off in your or your partner's vagina during sexual intercourse	40.5
Having difficulty rolling it down the penis	40.5
Keeping it on while engaging in sexual activity	35.7
Lost an erection while putting a condom on	26.2
Lost an erection while having sexual intercourse	23.8
Tearing it when putting it on	19.0
Tearing the condom when getting it out of the packet	11.9
Removed a condom prematurely (before ejaculating) during sexual intercourse because of losing an erection	7.1
Having the condom come off in your partner's anus during anal sex	4.8
Having difficulty taking it off	4.8

The contraceptive pill has become a popular option for many women throughout the developed world in preventing pregnancy. Female respondents

were asked if they had ever used the contraceptive pill and if so what side effects from a list provided had they experienced. More than four fifths (82.4%, n=17) of the woman reported having ever used a contraceptive pill. The most common side effects reported by women were:

- Breast soreness and tenderness (23.5%)
- Absent or lighter than normal periods (17.6%)
- Vaginal thrush (17.6%)
- Decrease in sexual desire (17.6%)
- Weight gain (11.8%)
- Changes in appetite (11.8%)
- Nausea (11.8%),
- Depression (11.8%),
- Bleeding between periods (11.8%)
- Fatigue (11.8%)
- Irritability (11.8%)

7.7 Pregnancy

The median age of first menarche for female respondents was 12 years and close to three fifths (58.8%) of respondents had experienced their first menarche under the age of 13. Female respondents were asked about their experiences with pregnancy. The majority of female participants (70.6%, 12/17) reported ever having been pregnant. From this group, two thirds of these women (66.7%) had experienced a miscarriage, two women had experienced a stillbirth, one woman experienced a premature birth and one woman had a pregnancy terminated.

7.8 Sexually Transmitted Infections

The prevention of sexually transmitted infections has received growing attention in recent times especially since the advent of HIV/AIDs and its associated mortality and morbidity. Respondents were asked if they had ever had an STI and HIV test. Just over half of the respondents (54.8%, n=42) reported ever having an STI test and just over a quarter (28.6%) reported having an HIV test. Close to a third of respondents (31.0%) reported ever having an STI, the most common being chlamydia, gonorrhoea, and genital warts (Human Papilloma virus). Of those who reported ever having an STI, a little over two thirds (69.2%) told their current or previous sexual partners.

7.9 Sexual and Reproductive Health

Respondents were asked about sexual and reproductive health self care and monitoring. A little over half of women (52.9%, n=17) reported checking their breasts regularly for unusual lumps and two fifths of men (40.0%, n=25) reported checking their testicles for unusual lumps. The majority of women (88.2%) reported having a regular gynaecological examination performed by a medical professional, whereas about half of men (52.9%) reported ever having a prostate examination performed. The high proportion of both women and men reporting regular medical exams is explained by the median age for the study sample being over 40-years. A little over a third of women (35.3%) reported ever having a mammogram and three quarters (76.5%) reported having a regular period.

Women surveyed were shown a list of symptoms typically associated with menstruation and asked whether it was an issue for them. The most common symptoms reported were:

- Abdominal cramping (58.8%)
- Irritability (52.9%)
- Breast tenderness (52.9%)

- Headache (41.2%)
- Fatigue (41.2%),
- Crying for no apparent reason (41.2%)
- Bloating in the abdomen (35.3%)
- Sadness (35.3%)
- Food cravings (35.3%)

Furthermore, the most common sexual and reproductive health issues reported by women sampled included vaginal thrush (58.8%) and urinary tract infections (52.9%). Fewer women reported ever having ovarian cysts (17.6%) and endometriosis (11.8%). Sexual and reproductive health issues were uncommon in the men sampled with only one male respondent reporting that he had ever had prostate cancer.

7.10 Sexual Functioning

Respondents were asked if they had experienced any sexual functioning issues ever and in the last year. A list was provided of the most common sexual functioning issues found in the literature today and modified accordingly. A number of gender differences emerged. These are presented in

Table 6. Women were more likely than men to report regular lack of desire or interest for sexual activity both ever and in the last year, and regular avoidance of all or almost all sexual contact with a sexual partner both ever and during the last year. Arousal and orgasmic difficulties were less common sexual issues in women when compared to difficulties in sexual desire. Lastly, a small proportion of men reported arousal and orgasmic difficulties.

Table 6. **Self-Reported Sexual Functioning Issues** (Men n=25,Women n=17)

Issue	**Ever** (%)	**In the Last Year** (%)
Regular lack of desire or interest for sexual activity		
Men	28.0	20.0
Women	70.6	41.2
Regular avoidance of all or almost all sexual contact with a sexual partner		
Men	16.0	16.0
Women	40.2	23.5
Regular lack of physical or emotional response to erotic stimulation		
Women	17.6	11.8
Regular involuntary spasm of the muscles in the vagina, which interferes with sexual intercourse		
Women	-	-
Regular inability to achieve orgasm through masturbation or sexual intercourse		
Men	-	-
Women	23.5	11.8
Regular inability to achieve or maintain an erection until the completion of sexual activity		
Men	8.0	8.0

Table 6. **Self-Reported Sexual Functioning Issues (**cont.)		
Issue	**Ever** (%)	**In the Last Year** (%)
Regular inability to ejaculate during masturbation or sexual intercourse Men	4.0	4.0
Regular ejaculation with minimal sexual stimulation before or shortly after penetration Men	8.0	8.0

7.11 Variations in Sexual Thoughts and Behaviours

Respondents were asked a series of questions on sexual appearance, sexual fantasies, sexual intercourse outside of a primary relationship, sexual curiosity and whether they had been a victim of a sexual crime. The most common modification to sexual experience was cutting or shaving of pubic hair (76.0% men, 82.4% women). Less common modifications to sexual appearance was nipple and genital piercing. Approximately one third of men (31.0%) who responded had been circumcised.

Most men and women reported ever having a sexual fantasy (96.0% men, 76.5% women). Men were more likely than women to report having ever had sexual fantasies involving:

- A celebrity (44.0% vs. 17.6%)
- Their partner's friend (28.0% vs. 17.6%)

- Their partner's sibling (16.0% vs. 0.0%),
- A person in uniform (28.0% vs. 17.6%)
- Someone younger (40.0% vs. 23.5%)
- A threesome (64.0% vs. 23.5%)
- Group sex (28.0% vs.5.9%),
- A complete stranger (40.0% vs. 17.6%)
- Being dominant (20.0% vs. 11.8%)
- Sex in a public place (32.0% vs. 17.6%)

Men and women were equally likely to report having ever had sexual fantasies where they were being watched while having sex (28.0% vs. 23.5%) and forced sex (20.0% vs. 17.6%).

Roughly a quarter of the men and women (28.0% men, 29.4% women) who responded to this survey reported that they had sexual intercourse with someone else outside of their primary relationship. In addition, two fifths of women (41.2%) and one third of men (32.0%) reported that a previous or

current sexual partner had sexual intercourse with another person while they were in a relationship with the respondent.

With respect to sexual curiosity, men were more likely than women to report ever dressing in clothing worn by the opposite sex (20.0% vs. 0.0%) and to secretly observe others having sex (20.0% vs. 5.9%). Also, men and women were equally likely to report ever exposing themselves in public or making obscene phone calls (16.0% vs. 17.6%) and inflicting or receiving pain during sexual activity (24.0% vs. 23.5%).

A total of three respondents reported being forced to engage in sexual activity with an adult as child (two women and one man). None of the respondents of who had been sexually abused as children reported this to the Police. Also, two fifths (41.2%, 7/17) of women reported being forced to have sexual intercourse as an adult by another adult. Only one of the women who had been forced to have sexual intercourse by another adult reported this to the Police. No male respondents reported any experience of sexual violation as an adult.

7.12 Lifetime Sexual Activity

Sexuality over the lifespan varies somewhat with the onset of sexual behaviours being influenced by a number of biological, psychological and

social-cultural variables. Respondents were asked a series of questions on lifetime sexual activity including masturbation, pornography use, sex toy use and other sexual experiences. A similar proportion of men and women reported they had masturbated (96.0% men, 88.2% of women). The median age for men to start masturbating was 13 years with a minimum and maximum debut age for masturbation of 7 and 28 years respectively. In comparison, the median age for women was 15 years with a minimum and maximum debut age of 8 and 25 years respectively.

Most men and women surveyed reported having ever viewed pornography (96.0% men, 88.2% women). The most common medium for viewing pornography by respondents was magazines, DVD, video, and the internet. A substantial proportion of both men and women reported having ever viewed pornography with a sexual partner (60.0% men, 70.6% women). Just over a quarter of women (29.4%) and one fifth of men reported they paying for the pornography they viewed. Three quarters of women (76.5%) and over half of men (56.0%) of men reported having ever used a sex toy, with the vibrator being the most commonly used toy followed by the penis ring and dildo.

Other lifetime sexual experiences worthy of noting here include the number of lifetime sexual partners and lifetime experiences of oral sex,

vaginal sex, anal sex, threesomes, group sex and swinging. Just over a third of men (36.0%) and around two fifths of women (41.2%) had between one and five sexual partners in their lifetime. A further fifth of men (20.0%) and just under a third of women (29.4%) had between six and ten partners. The remaining forty four percent of men and twenty nine percent of women had eleven or more sexual partners in their lifetime. Most of the men and women who responded to this survey had experienced oral sex (92.0% men, 100.0% women) and vaginal sex (88.0% men, 100% women). Women were more likely than men to have experienced anal sex (64.7% vs. 32.0%), while threesomes (24.0% men, 11.8% women) group sex (12.0% men, 11.8% women) and swinging (4.0% men, 0.0% women) were less common.

7.13 Current Sexual Activity

Respondents were asked a series of questions on their sexual activity over the last year on masturbation, pornography use, sex toy use and sexual intercourse. A summary of the reported frequency on several sexual behaviours by respondents is provided in Table 7. Men were more likely than women to have reported masturbating in the last year with nearly three quarters of men (72.0%) masturbating one or more times per week compared to less than a fifth of women (17.7%). Men were also more likely than women to view pornography in the last year with two fifths of men (40.0%) viewing it

one or more times per week. Women were more likely than men to have used a sex toy in the last year with all those reporting use to have done it one time a month or less. A greater proportion of men than women (28.0% vs. 0.0%) did not have vaginal intercourse in the last year with frequency distributions between men and women being largely symmetrical. Just over a third of men (36.0%) and close to a quarter of women (23.5%) did not engage in oral sex either in a giving or receiving capacity. Lastly, men were more likely than women (24.0% vs. 0.0%) to have engaged in anal sex in the last year where they were the 'giver'.

Several further findings emerged around masturbation behaviour in the last year. Firstly, of the women who masturbated nearly three quarters (72.7%, n=11) reported feeling guilty for doing so. Respectively, of the men who masturbated just over half (54.2%, n=24) reported feeling guilty for doing so. The most common reasons for masturbating for both men and women were to relieve sexual tension, to relax and to get to sleep. Men were more likely than women to masturbate because they had no sexual partner or because their sexual partner did not want to have sexual intercourse.

Respondents were also asked to report on the number of sexual partners, same-sex intercourse, contraception, foreplay, orgasm and consensual unwanted sexual activity experiences over the last year. The vast majority of

male and female respondents had between one and three sexual partners in the last year (64.0% men, 100.0% women).

Table 7. **Sexual Behaviour in the Last Year** (Men n=25, Women n=17)

Activity	**Didn't** (%)	**Less than once a month** (%)	**Once a month** (%)	**2-3 times a month** (%)	**Once a week** (%)	**2-3 times a week** (%)	**4-6 times a week** (%)	**Once daily or more** (%)	**Varied to often to say** (%)	**NR*** (%)
Masturbation										
Men	4.0	8.0	-	4.0	12.0	36.0	24.0	4.0	4.0	4.0
Women	35.3	17.6	17.6	11.8	11.8	5.9	-	-	-	-
Pornography Use										
Men	28.0	4.0	4.0	20.0	8.0	24.0	8.0	-	-	4.0
Women	76.5	17.6	-	-	-	-	-	-	-	5.9
Sex Toy Use										
Men	88.0	8.0	-	-	-	-	-	-	-	4.0
Women	70.6	29.4	-	-	-	-	-	-	-	-
Vaginal Intercourse										
Men	28.0	12.0	12.0	20.0	16.0	12.0	-	-	-	-
Women	-	23.5	-	23.5	17.6	17.6	5.9	-	-	11.8
Oral Sex (Receiver)										
Men	36.0	20.0	8.0	16.0	8.0	12.0	-	-	-	-
Women	23.5	35.3	5.9	11.8	11.8	11.8	-	-	-	-
Oral Sex (Giver)										
Men	36.0	24.0	12.0	12.0	8.0	8.0	-	-	-	-
Women	23.5	35.3	11.8	11.8	11.8	5.9	-	-	-	-
Anal Sex (Receiver)										
Men	88.0	-	-	-	-	-	4.0	4.0	-	4.0
Women	88.2	-	-	-	5.9	-	-	-	-	5.9
Anal Sex (Giver)										
Male	76.0	8.0	-	-	4.0	-	12.0	-	-	-
Female	100.0	-	-	-	-	-	-	-	-	-

Only two women (11.8%, n=17) and seven men (28.0%, n=25) reported having sexual intercourse with someone of the same sex in the last year.

With respect to contraception, close to a third of men (30.0%, n=20) and a quarter of women (25.0%, n=16) reported ‘never’ using contraception to avoid pregnancy. Also, an additional 60 percent of men and just over two thirds women (68.8%) reported ‘always’ using contraception to avoid pregnancy.

When it came to acts of foreplay, two fifths of men and (40.0%) and nearly half of women (47.1%) reported spending between 11 and 20 minutes on pleasuring their partner before sexual intercourse. A further 50 percent of men and a little over two fifths of women (41.1%) would spend ten minutes or less on acts of foreplay.

Respondents were asked how often they would orgasm during sexual intercourse over the last year. Men were more likely than women to ‘always’ orgasm during sexual intercourse (60.0% vs. 17.6%). However, around two fifths of women (41.2%) and a quarter of men (25.0%) would ‘usually’ orgasm during sexual intercourse. Women were more likely than men to report faking an orgasm during sexual intercourse (47.1% vs. 0.0%). Specifically, over a quarter of women (29.4%) would report faking an orgasm ‘usually’ or ‘sometimes’. Lastly, women were more likely than men to report consenting to

unwanted sexual activity or sexual intercourse in the last year (29.4% vs. 8.3%).

7.14 Respondent Feedback

Respondents were asked a series of questions about doing the survey. Nearly three quarters of participants (71.4%) reported that they 'liked' completing the survey. Nearly all the respondents reported (97.6%) that the questions within the survey were 'easy' to understand. Lastly, three quarters of respondents (76.2%) reported that the length of the survey was 'about right'.

This chapter has provided a comprehensive account of sexual health, knowledge attitudes and behaviour among a small sample of Christchurch adults highlighting the notion that sexual health and wellbeing is more than just the prevention of STIs and unplanned pregnancies. One of the most salient themes from these findings is the gender differences in expression of sexuality. However, it also worthy to note that within-sex variability is equally as important as evinced by the data gathered from this study.

CHAPTER EIGHT

Discussion

The sexual and reproductive health status of New Zealand adults is a leading public health issue, but in recent times has lost traction within the political arena. The total economic burden of sexual violence, induced abortions, infertility treatment, STI treatment, treatment of sexual dysfunctions and treating cancers associated with sexual and reproductive health is substantial. Many of the sexual and reproductive health challenges faced by society today are preventable and an important step in addressing these challenges is to get this issue back on the political agenda. In addition, the focus of the current New Zealand Sexual and Reproductive Health Strategy (Ministry of Health, 2001) on reducing STIs and unwanted pregnancies is too narrow and out dated. The strategy fails to take into account the complexity and diversity of human sexual expression, but more importantly ignores several other areas of sexual and reproductive health that require attention, for example adult sexual violence and sexual dysfunction.

The Christchurch Sexual Health and Wellbeing Study (CSHWS) represents one of the few studies that examines adult sexual health and wellbeing within New Zealand using internet-based technology to collect

data on current patterns of sexual health, knowledge and behaviour. Future research in adult sexual behaviour is critical to improving the sexual health and wellbeing of New Zealanders. The findings from this study indicate that human sexual expression comes in many different shapes and forms. Furthermore, gender differences emerged in several areas including:

- Attitudes to sex and relationships
- Sources of information for learning about sex
- First sexual intercourse
- Sexual functioning issues
- Sexual fantasies
- Orgasm from intercourse
- Sexual violation
- Consenting to unwanted sexual activity

Overall, the frequencies for the sexual health and wellbeing behaviours reported by respondents in this study are higher than comparable sexual behaviours found in the five comparative studies: U.S. National Health and Social Life Survey (NHSLS) (Laumann et al., 1994); UK National Study of Attitudes and Lifestyles II (NATSAL II) (Johnson et al., 2001); Australian Study of Sexual Health and Relationships (ASSHR) (Smith et al., 2003a); New Zealand Partner Relations Survey (NZPRS) (Davis et al., 1993); and U.S. National Study of Sexual Health and Behaviours (NSSHB) (Herbenick

et al., 2010a). However, it is not clear whether this finding is an accurate reflection of the current sexual and reproductive health status of the sample population or whether participation bias has overestimated the rate of behaviours in question. This would need to be investigated in future studies. It is also possible that the different study designs used in the above surveys may have impacted on the reporting of sexual attitudes, knowledge and behaviour.

Specifically, the median age of first sexual experience (not including oral, vaginal or anal sex) in this study was lower than the other comparable studies. The median age of first intercourse (including oral, vaginal or anal sex) was similar to the NZPRS, U.S. NHSLS and the ASSHR, but higher than the UK NATSAL (2000). However, it is important to note that the UK NATSAL (1990) included 16 and 17 year old participants in their study, which along with the reported 'cohort' effect demonstrated in other studies, may have lead to a lowering of the median age at first intercourse. Also, both lifetime experiences and experiences in the last year of sexual behaviours such as masturbation, oral, vaginal and anal sex were higher as were pornography and sex toy use than in the U.S. NHSLS, ASSHR and U.S. NSSHB. Sexual attacks on women were more common in this study than in the ASSHR. Sexual functioning issues were slightly less common for both men and women in this study when compared to the findings from

the ASSHR and were less common for men but not women in the U.K. NATSAL II. Lastly, reporting of STIs in this study was higher than in the five comparative studies. It is not clear why the reporting of STIs in this study was higher, but several possible reasons may account for this finding including participation bias inflating the occurrence of STIs, more people seeking testing and treatment or perhaps safe sex messages delivered through the sexuality education curriculum are not getting through.

Several areas from this study warrant further investigation using more rigorous study designs. These include:

1. The desired content of sexuality education delivered in high schools.
2. STI prevention and contraception use during first sexual intercourse.
3. Condom use errors and problems.
4. Sexual functioning issues.
5. Sexual self-care.
6. Sexual violation in women.
7. Consenting to unwanted sexual intercourse.

Study designs that may prove useful in gathering additional information in the above mentioned areas could include population-based surveys (both general and clinic populations), case-control studies,

longitudinal studies and intervention studies. Furthermore, future studies employing a public health approach would need to fulfil step two of the framework and attempt to identify potential biological, psychological and socio-cultural risk and protective correlates. This knowledge could then be used to develop effective interventions that will lead to better sexual and reproductive health outcomes for adults. To my knowledge, a suitable theoretical framework to undertake research in the above areas in their entirety is lacking. The creation of a theoretical model by synthesising models applied to topics within the fields of human sexuality and health behaviour change may be worth investigating, otherwise continued research of these areas may need to occur separately using alternative theoretical frameworks. Suitable models may include social exchange theories like Equity Theory (Hatfield, Utne & Traupmann, 1979, as cited in Sprecher, 1998) or the Interpersonal Model of Sexual Satisfaction (e.g. Lawrance & Byers, 1992, as cited in Sprecher, 1998), evolutionary theories such as Sexual Strategies Theory (Buss & Schmitt, 1993), and health behaviour change theories such as The Health Belief Model (e.g. Hochbaum, 1958, as cited in Roden, 2004). Thus, at this point the public health approach appears to be the most effective way of enhancing the sexual health and wellbeing of New Zealand adults because it takes a whole of life, whole of population approach.

The low response rate in this study has meant that making robust inferences about the source population is significantly reduced. The response rate is lower than the response rates of previous research incorporating the use of the Internet-based surveys (e.g. Kaplowitz et al., 2004; Sheehan, 2001). There was no protocol in this study to question non-responders about the reasons for refusing to participate in the study. Previous research has identified that the reasons for non-response or non-participation vary somewhat but include non-contact with selected addresses, refusals, respondent being ill or unable to speak the appropriate language (Fenton et al., 2001), use of pre-notification and the number of follow up contacts (Sheehan, 2001). If similar research was to be undertaken in the future, the use of follow up contact is likely to lead to a significant increase in the response rate (Sheehan, 2001). Furthermore, two persons selected from the electoral roll for this study contacted the principal investigator and cited inaccessibility to the Internet as the only reason for not responding to the survey. It appears plausible that non-responders in this study may not have been able to use computers and the Internet. This would have to be verified in future studies of this nature. Importantly, several recipients of the invitation letter, all of whom were in their 80s phoned the principal investigator saying that this study did not interest them hence why they refused to participate. This suggests that a sample selection process

that imposes an upper-age limit may reduce non-response, but clearly it needs to be different from an electoral roll approach where the age is unknown other than older enough to vote. Other factors that may have impacted negatively on the response rate include:

- The survey topic
- The age of the respondent (elderly).
- The lack of financial incentive
- Questionnaire length
- The bold warning contained within the information sheet specifying the questionnaire contains sexually explicit questions that may cause mental distress and moral or cultural offense

Again, these claims would need to be verified empirically in future studies. Item non-response was a minor feature in this study with over 93 percent of questions being answered by all respondents.

There were no checks to verify the authenticity of the respondent's identities. In future studies using Internet-based surveys, it may be worthwhile to contact the respondent by telephone or email, where possible, to cross check that it is them who is completing the questionnaire.

8.1 Implications

Even though there are some serious methodological shortcomings associated with this study, which make it exceedingly difficult to determine whether there has been a shift in patterns of adult sexual health and behaviour within New Zealand, the results provide sufficient motive to continue with more robust study designs that will hopefully be able to answer this question. The application in internet technology has been an important step in researching this difficult area in New Zealand. It has allowed consideration of important issues for data collection so that future studies have the opportunity to ensure a higher response rate. It is not clear whether these findings are fair and accurate depictions of the current state of adult sexual and reproductive health or whether they are the result of participation bias. Despite its limitations, this study has shown that there is more to sexual and reproductive health than preventing STIs and unwanted pregnancies, which means the existing sexual and reproductive health vision documented in the New Zealand Sexual and Reproductive Health Strategy (Ministry of Health, 2001) is due for replacement. Further regional and national investigations into adult sexual health and wellbeing incorporating the use of Internet-based surveys under circumstances that can increase the response rate may prove useful in guiding the development of a new sexual and reproductive health strategy, one that encapsulates the

complexity and cultural diversity of sexual health and wellbeing within New Zealand.

8.2 Conclusions

This study is the first in nearly two decades to collect data on current patterns of adult sexual health, knowledge, attitudes and behaviour within New Zealand. Furthermore, it is one of a few studies using Internet-based technology as a primary information gathering tool on adult sexual and reproductive health. Unfortunately, this study has not been able to determine whether there has been a shift in patterns of adult sexual health and behaviour over the last two decades in New Zealand. The findings need to be examined further using more robust study designs that incorporate rigorous follow-up protocol. It is crucial that funding be made available for continued research into adult sexual health and wellbeing for there to be any improvement in the sexual and reproductive health outcomes of New Zealanders.

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APPENDICES

Appendix A – Invitation Letter

Health Sciences Centre

Private Bag 4800
Christchurch 8020
Tel: +64 3 364 2987, Fax: + 64 3 364 2490
Email: healthsciences@canterbury.ac.nz

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Type date here

Dear

Your name has been randomly selected from the general electoral roll. You are invited to participate in the research project Christchurch Sexual Health and Wellbeing Study.

The aim of this project is to explore current patterns of sexual health knowledge, attitudes and behaviour among a representative sample of Christchurch adults and use these findings to improve sexual health policy and practice, sexuality education and research into human sexuality within New Zealand. Your involvement in this project will be in the form of an **internet-based questionnaire**, which will ask you a series of questions on your sexual knowledge, attitudes, behaviours and health. The questionnaire will take between 30 minutes to one hour to complete.

If you do have access to the internet and are willing to be a part of this study, please go to the following website and follow the instructions provided:
http://cantmd.canterbury.ac.nz/limesurvey/index.php?sid=95872&lang=en

The questionnaire is anonymous, and you will not be identified as a participant of this study.

You may withdraw your participation, including withdrawal of any information you have provided, until your questionnaire has been submitted electronically. Because it is anonymous, it cannot be retrieved after that.

By completing the questionnaire it will be understood that you have consented to participate in the project, and that you consent to publication of the results of the project with the understanding that anonymity will be preserved, and only aggregated (group) data will be reported.

WARNING:

The questionnaire contains sexually explicit questions that may cause mental distress and moral or cultural offense. You are not required to answer such questions. If at any point during completion of the questionnaire you become distressed please note that a full list of support services will be provided with this invitation letter and the online questionnaire.

The project is being carried out as a requirement for part II of a Master in Health Sciences degree by Kosta Tabakakis under the supervision of Associate Professor Ray Kirk (Director of the Health Sciences Centre), who can be contacted at ray.kirk@canterbury.ac.nz or 364-3108. He will be pleased to discuss any concerns you may have about participation in the project.

The project has been reviewed **and approved** by the University of Canterbury Human Ethics Committee.

My contact details are cta17@student.canterbury.ac.nz or 021 252 0554.

Yours sincerely

Kosta Tabakakis

List of Support Services for those Seeking Additional Information or Help

Lifeline 0800 543 354 (Counselling phone line)

Free 24 hour, 7 days a week telephone service offering confidential, telephone counselling. Email counselling service available at counselling@lifeline.co.nz

Healthline 0800 611 116

A 24 hour, 7 day a week free telephone health service, staffed by registered nurses. The service offers health information and advice, as well as assessment of symptoms and referral on the appropriate health provider as required

Psychiatric Emergency Service 364 0482 or 364 0640 after hours

Provides 24 hour psychiatric care for urgent and emergency situations. A mobile service is available. Duly Authorised Officers available 24 hours for psychiatric assessments. Referrals can be made by any member of the public including self referrals, family, friends, GPs and community agencies.

Alcohol and Drugs – Helpline 0800 787 797 Website: www.druginfo.org.nz

Confidential information, advice and referral service for people

Gay and Lesbian Line – Christchurch 379 4796 Website: www.gaylesbianlinechch.org.nz

A free telephone support service. Offers an automated answer message with suggestions of relevant agencies to contact. Callers can also leave a message it they wish to be contacted by a phone line support person.

Sexual Abuse Centre 364 7324 (Counselling line) Website: www.sexualabuse.co.nz

Offers telephone counselling, advocacy, support groups for sexual abuse and rape survivors, information and resources, 1 to 1 counselling with a qualified counsellor. Office hours Mon-Fri 9.00am to 4.00pm, Counselling line Mon-Fri 9.00am to 4.00pm

Victim Support Christchurch Helpline 0800 842 846 (24 hrs 7 days)

Provides 24 hour emotional support, personal advocacy and information to all people affected by crime and trauma throughout New Zealand.

Family Planning Helpline 0800 4636 5463 Website: www.familyplanning.org.nz

Family Planning works to promote a positive view of sexuality and to enable people to make informed choices about their sexual and reproductive health and well-being. At Family Planning Clinics you can access services such as: contraception, sexually transmissible infection checks and treatment, menopause advice, cervical smear tests, vasectomy, pregnancy testing and advice and much more.

The Christchurch Sexual Health Centre 364 0485

Offers free sexual health assessment, treatment advice and counselling. Address: 33 St Asaph Street, Addington, Canterbury 8011.

Appendix B – Information Sheet

Health Sciences Centre

Private Bag 4800
Christchurch 8140
Tel: +64 3 364 2987, Fax: + 64 3 364 2490
Email: healthsciences@canterbury.ac.nz

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

INFORMATION SHEET

Thank you for agreeing to participate in the research project Christchurch Sexual Health and Wellbeing Study.

Aim of the study

The aim of this project is to explore current patterns of sexual health, knowledge, attitudes and behaviour among a representative sample of Christchurch adults and use these findings to improve sexual health policy and practice, sexuality education and research into human sexuality within New Zealand.

Why are you being asked such sensitive questions?

Sexual health is an important part of overall health. Asking such sensitive questions on sexual health and wellbeing is a critical step in being able to meet the sexual health needs of Christchurch adults.

What will result from your participation?

Your participation in this project will help us build a profile of the sexual health and wellbeing of Christchurch adults. Hopefully, this profile can then be used as a platform for further, more specialised research in the field with the ultimate goal being that of improving sexual health policy, sexuality education and sexual health services being offered in Christchurch.

What will it involve?

Your involvement in this project will be in the form of an **internet-based questionnaire**, which will ask you a series of questions on your sexual knowledge, attitudes, behaviours and health. The questionnaire will take between 30 minutes to one hour to complete.

The questionnaire

The questionnaire is anonymous and you will not be identified as a participant of this study.

You may withdraw your participation, including withdrawal of any information you have provided, until your questionnaire has been submitted. Because it is anonymous, it cannot be retrieved after that.

By completing the questionnaire it will be understood that you have consented to participate in the project, and that you consent to publication of the results of the project with the understanding that anonymity will be preserved, and only aggregated (group) data will be reported.

WARNING:

The questionnaire contains sexually explicit questions that may cause mental distress and moral or cultural offense. You are not required to answer such questions. If at any point during completion of the questionnaire you become distressed please note that a full list of support services will be provided at the end of the questionnaire.

The information gathered from this study will be kept for a period of seven years. This is a legal requirement.

Due to budget limitations the questionnaire is only available in English.

My background

I have been a tertiary student for close to a decade, earning undergraduate qualifications in business and psychology, and postgraduate qualifications in education and public health. During this time it has become clear to me that there is a lack of New Zealand data on adult sexual health and wellbeing. Importantly, sexual health in this sense is a state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity.

I have also worked as a peer sexuality educator teaching second year high school students about contraception, sexually transmitted infections, sexual anatomy, reproduction, sexual decision making and negotiation. Most recently, I have worked as a casual research assistant in the field of mental health and suicide prevention. Working in these fields has helped me appreciate the sensitivity of these topics.

Final Comments

The project is being carried out as a requirement for part II of a Master in Health Sciences degree by Kosta Tabakakis under the supervision of Associate Professor Ray Kirk (Director of the Health Sciences Centre), who can be contacted at ray.kirk@canterbury.ac.nz or 364-3108. He will be pleased to discuss any concerns you may have about participation in the project.

The project has been reviewed **and approved** by the University of Canterbury Human Ethics Committee.

If you would like to receive information on the results of this study please let me know and I will send a summary of the results to you.

My contact details are cta17@student.canterbury.ac.nz or 021 252 0554.

Kosta Tabakakis

List of Support Services for those Seeking Additional Information or Help

Lifeline 0800 543 354 (Counselling phone line)

Free 24 hour, 7 days a week telephone service offering confidential, telephone counselling. Email counselling service available at counselling@lifeline.co.nz

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Confidential information, advice and referral service for people

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The Christchurch Sexual Health Centre 364 0485

Offers free sexual health assessment, treatment advice and counselling. Address: 33 St Asaph Street, Addington, Canterbury 8011.

Appendix C – Ethics Approval Letter

Human Ethics Committee

Secretary
Tel: +64 3 364 2241, Fax: +64 3 364 2856, Email: human-ethics@canterbury.ac.nz

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Ref: HEC 2009/37

15 May 2009

Kosta Tabakakis
Health Sciences Centre
College of Education
UNIVERSITY OF CANTERBURY

Dear Kosta

The Human Ethics Committee advises that your research proposal "Christchurch Sexual Health and Wellbeing Study: Exploring patterns of sexual health, knowledge, attitudes and behaviour among a representative sample of adults" has been considered and approved.

Please note that this approval is subject to the incorporation of the amendments you have provided in your email of 12 May 2009.

Best wishes for your project.

Yours sincerely

Dr Michael Grimshaw
Chair, Human Ethics Committee

Appendix D – Female Questionnaire

1. What is your age? Please specify here:

2. What is your sex?

Female	1
Male	2
Intersex	3
Other	96

3. Which of the following best describes your employment status?

Unemployed	1
Full-time	2
Part-time	3
Casual	4
Beneficiary	5
Voluntary	6
Student	7

4. Which one of the following areas would you say your occupation best belongs to?

Agriculture, Horticulture, Forestry, Seafood and Mining	1
Transport and Storage	2
Health and Community Services	3
Engineering	4
Tourism and Hospitality	5
Retail, Wholesale and International Trade	6
Finance and Insurance	7
Communications	8
Administration, Business and Property Services	9
Cultural, Information and Recreation Services	10
Construction, Electricity, Gas and Water Supply	11
Education and Social Services	12
Personal, Protection and Legal Services	13
Government Administration and Defence	14
Manufacturing	15
Other	96

5. Which of the following best describes your relationship status?

Single	1
Dating	2
De Facto	3
Married	4
Separated	5
Divorced	6
Widowed	7

6. Which one of the following best describes your annual household income?

$10,000 or below	1
$10,001-$20,000	2
$20,001-$30,000	3
$30,001-$40,000	4
$40,001-$50,000	5
$50,001-$60,000	6
$60,001 +	7

7. Which country were you born in? Please specify here:

8. Which of the following ethnic groups do you identify with? Please circle the numbers that apply below or you can specify the exact ethnic group(s) you identify with in the space provided below.

NZ European	1	Other Pacific Island	8
NZ Maori	2	Indian	9
Other European	3	Chinese	10
Samoan	4	Other Asian	11
Tongan	5	American	12
Fijian	6	Latin American	13
Cook Island	7		

Other, please specify here:

9. Which of the following best describes your living arrangements?

Living alone	1
Boarding	2
Flatting	3
Living with parents	4
Adult living with partner	5
Adult living with partner and child/children	6
Adult living with child/children	7

10. What is the highest qualification you have achieved?

School Certificate/NCEA Level 1	1
Six Form Certificate/ Higher School Certificate/NCEA Level 2	2
University Entrance/Bursary/NCEA Level 3	3
Undergraduate Certificate	4
Undergraduate Diploma	5
Bachelors Degree	6
Honours Degree	7
Postgraduate Certificate	8
Postgraduate Diploma	9
Graduate Certificate	10
Graduate Diploma	11
Master's Degree	12
PhD	13
Post PhD/Post Doctoral	14
None	98

11. Which of the following statements best describes your sexual orientation?

I am attracted to individuals of the **opposite** sex	1
I am attracted to individuals of the **same** sex	2
I am attracted to individuals of **both** sexes	3
I am not attracted to individuals of **either** sex	4
None	98

12. How important is religion to you?

Very important	Fairly important	Neutral	Not very important	Not important at all
1	2	3	4	5

13. Please specify the name of any religion you are affiliated with in the space provided below. If you are not affiliated with any religion please write **Nil** in the space provided.

Religion:_____

14. How often do you attend religious services or meetings?

Once a week or more	1
At least once every 2 weeks	2
At least once a month	3
At least twice a year	4
At least once a year	5
Varies	6
Never	7

General Health Status

15. What is your opinion of your current general health?

Very Good	Good	Fair	Bad	Very Bad
1	2	3	4	5

16. Do you have a long-term health illness, health problem or disability which limits your daily activities, your socialising with others or the work you can do?

Yes	1
No	2

If you answered yes, please specify which here:

17. Have you been diagnosed as having a mental health disorder by a G.P., psychiatrist or psychologist within the last 12 months?

Yes	1
No	2

If you answered yes, please specify which here:

18. Have you been admitted to hospital in the last 12 months?

Yes	1
No	2

If you answered yes, please specify why here:

19. Have you had an operation in the last 12 months?

Yes	1
No	2

If you answered yes, please specify why here:

20. How old were you when you had your first menstrual period? Please specify here:

21. Have you been pregnant in the last 12 months?

Yes	1
No	2

22. Are you on any medications currently?

Yes	1
No	2

If you answered yes, please specify which (including the dosage) here:

23. In the last 12 months how often would you say you had a drink containing alcohol?

5 or more days a week	1
3-4 days a week	2
1-2 days a week	3
1-2 times per month	4
1-2 times in the last 12 months	5
Not at all in the last 12 months	6
Varied too much to say	7

24. How many drinks containing alcohol do you have on a typical day when you do drink?

I don't drink	1
1-2	2
3-4	3
5-6	4
7-9	5
10 or more	6

25. Have you ever smoked cigarettes regularly (at least 1 a day)?

Yes	1
No	2

26. Do you smoke cigarettes currently?

Yes	1
No	2

If you answered yes, how many cigarettes do you smoke in a typical day? Please specify here:

27. Have you taken any illegal drug(s) in the last 12 months?

Yes	1
No	2

If you answered yes, please specify how often you would use the drug(s):

28. What is your current weight in kilograms? Please specify here:

29. What is your height in centimetres? Please specify here:

Section Two: Attitudes to Sex and Relationships

Please provide your opinions on the following topics. Please circle the appropriate cell.

30. Sex before marriage is…

Not wrong at all	Sometimes wrong	Almost Always wrong	Always wrong	No opinion
1	2	3	4	94

31. Sex before the age of 16 is…

Not wrong at all	Sometimes wrong	Almost Always wrong	Always wrong	No opinion
1	2	3	4	94

32. Sexual activity and intercourse between consenting adults of the same sex is…

Not wrong at all	Sometimes wrong	Almost Always wrong	Always wrong	No opinion
1	2	3	4	94

33. Sexual intercourse with a person without being in love with them is…

Not wrong at all	Sometimes wrong	Almost Always wrong	Always wrong	No opinion
1	2	3	4	94

34. Being romantically and sexually involved with one person and having sexual intercourse with someone else is…

Not wrong at all	Sometimes wrong	Almost Always wrong	Always wrong	No opinion
1	2	3	4	94

35. Masturbation is…

Not wrong at all	Sometimes wrong	Almost Always wrong	Always wrong	No opinion
1	2	3	4	94

36. Sale of pornography to adults is…

Not wrong at all	Sometimes wrong	Almost Always wrong	Always wrong	No opinion
1	2	3	4	94

37. Having unprotected sexual intercourse when you do not know both your and your sexual partner's HIV and STI status is…

Not wrong at all	Sometimes wrong	Almost Always wrong	Always wrong	No opinion
1	2	3	4	94

38. Having sex with someone important in an organisation to get a job there is…

Not wrong at all	Sometimes wrong	Almost Always wrong	Always wrong	No opinion
1	2	3	4	94

39. Having sex with your boss to improve your position in the organisation is…

Not wrong at all	Sometimes wrong	Almost Always wrong	Always wrong	No opinion
1	2	3	4	94

40. Making my sexual partner orgasm during sex is…

Very important	Fairly important	Neutral	Not very important	Not important at all
1	2	3	4	5

41. Prostitution is…

Not wrong at all	Sometimes wrong	Almost Always wrong	Always wrong	No opinion
1	2	3	4	94

42. Is the government doing enough to make free internet porn less accessible to children and adolescents?

Yes	No	I am not sure	No opinion
1	2	3	94

43. Sexual activity and intercourse promotes human health and well-being?

Strongly agree	Agree	Not sure	Disagree	Strongly Disagree	No opinion
1	2	3	4	5	94

44. Should the termination of unwanted pregnancies be allowed?

No	1
Yes	2
Yes, but only in certain situations (e.g. rape)	3
I am not sure	4
No opinion	94

45. How important are each of the following to a successful marriage or relationship? Please rate each item below using the following key:

1 = very important
2 = fairly important
3 = neutral
4 = not very important
5 = not important at all

Sharing household duties	
Faithfulness	
Adequate Income	
Mutual respect and appreciation	
Shared religious beliefs	
Happy sexual relationship	
Having children	
Similar tastes and interests	
Physical attraction	
Spending quality time together	
Tolerance and acceptance	
Good communication	

No opinion 94

46. Which of the following situations would you classify as cheating on one's primary partner? Please circle all that apply.

Situation	**Yes this is cheating on one's partner**	**No this is not cheating on one's partner**
Close contact with another person who is not your primary partner (e.g. hugging, holding hands)	1	2
Having sexual thoughts about another person who is not your primary partner	1	2
Kissing another person who is not your primary partner	1	2
Touching intimate areas of another person who is not your primary partner (e.g. chest, penis, vagina, buttocks)	1	2
Oral intercourse of another person who is not your primary partner	1	2
Complete intercourse (heterosexual or homosexual) with another person who is not your primary partner	1	2

Section Three: Sexual Knowledge and Education

47. During your childhood and adolescence did you find it easy or difficult to talk about sexual matters with a parent or caregiver?

Easy	1
Difficult	2
Did not discuss sexual matters	3

48. When growing up which of the following ways did you learn about sex?

Parent	1	Sexual education at school	7
Caregiver	2	Movies	8
Siblings	3	Television	9
Cousins	4	Pornography	10
Friends	5	Doctor or nurse	11
Counsellor, psychologist, or social worker	6	First sexual partner	12

49. Should sexuality education be included in the Health curriculum in school?

Yes	1
No	2

If you answered yes, what age do you think sexuality education should be first taught at in school? Please specify here:

50. Remembering the time when you were taught sex education at school, how useful did you find this education?

Absolutely useful	Very useful	Neutral	Not very useful	Absolutely useless	Non Applicable
1	2	3	4	5	95

51. Which of the following topics **were** taught as part of the sexuality education curriculum when you were at school? Please circle all that apply.

General human development	1	Sexual decision making and pressure	10	Intimacy	19
Biological sexual development	2	Sexual response cycle	11	Love	20
Male and female sexual anatomy	3	Sexual dysfunction	12	Contraception	21
Male and female sexual health	4	Sex and alcohol	13	Abortion	22
Conception, pregnancy and childbirth	5	Sex and other drugs	14	Abstinence	23
Sexually transmitted infections (STIs)	6	Rape and its effects	15	Values	24
Sexual orientation and its diversity	7	Sexual abuse and its effects	16	Gender Roles	25
Culture and sexuality	8	Masturbation is not harmful	17	Infertility	26
Sexuality and disability	9	Relationship and communication skills	18		

52. Which of the following topics **should** be taught as part of the sexuality education curriculum at school? Please circle all that apply.

General human development	1	Sexual decision making and pressure	10	Intimacy	19
Biological sexual development	2	Sexual response cycle	11	Love	20
Male and female sexual anatomy	3	Sexual dysfunction	12	Contraception	21
Male and female sexual health	4	Sex and alcohol	13	Abortion	22
Conception, pregnancy and childbirth	5	Sex and other drugs	14	Abstinence	23
Sexually transmitted infections (STIs)	6	Rape and its effects	15	Values	24
Sexual orientation and its diversity	7	Sexual abuse and its effects	16	Gender Roles	25
Culture and sexuality	8	Masturbation is not harmful	17	Infertility	26
Sexuality and disability	9	Relationship and communication skills	18		

Section Four: First Sexual Experiences

First Heterosexual Experience

53. How old were you when you had your first sexual experience with someone of the **opposite** sex? **Note:** sexual experience could be any activity of a sexual nature apart from sexual intercourse, oral sex, anal sex, for example kissing, touching of the genitals, or close body contact.

Age (please specify in the box to the right)	☐
Cannot remember	2
Have not had any sexual experiences with someone of the **opposite** sex	3

54. How old were you when you had sexual intercourse with someone of the **opposite** sex for the first time? **Note:** sexual intercourse means vaginal intercourse, oral sex or anal sex.

Age (please specify in the box to the right)	☐	→ **Please continue**
Cannot remember	2	→ **Please continue**
Have not had sexual intercourse with someone of the **opposite** sex	3	→ **Please go to question 62**

55. How old was your partner at the time?

Specific age (please specify in the box to the right)	☐
Older	2
Younger	3
Don't know	4

56. Was it your partner's first time or not?

Yes	1
No	2
Don't know	3

57. Did you use any form of contraception?

Yes	1
No	2

If you answered yes, which of the following? Please circle all that apply.

Condom	1
The pill	2
Withdrawal	3
Calendar method	4
Diaphragm	5
Other contraceptive method	6

58. Remembering the first time you had sexual intercourse with someone of the **opposite** sex, which of the following best describes the situation with your sexual partner?

One night stand	1
Met only recently	2
Friends	3
Stable relationship	4
Unmarried (defacto) couple living together	5
Engaged to be married	6
Married	7
Rape	8
Sexual abuse	9
Other	96

59. Remembering the first time you had sexual intercourse with someone of the **opposite** sex, which of the following applies?

I should have waited longer before having sex	1
I could have had sex earlier	2
It was about the right time to have sex	3
I had no say in the matter	4

60. Remembering the first time you had sexual intercourse with someone of the **opposite** sex, did **you** consume alcohol or any other drugs before you engaged in sexual intercourse?

No alcohol or other drugs	1
Alcohol only	2
Other drugs only	3
Both alcohol and other drugs	4

61. Remembering the first time you had sexual intercourse with someone of the **opposite** sex, did **your partner** consume alcohol or any other drugs before you both engaged in sexual intercourse?

No alcohol or other drugs	1
Alcohol only	2
Other drugs only	3
Both alcohol and other drugs	4

First Homosexual Experience

62. How old were you when you had your first sexual experience with someone of the **same** sex as you? **Note:** sexual experience could be any activity of a sexual nature apart from sexual intercourse, for example kissing, touching of the breasts or genitals, or close body contact.

Age (please specify in the box to the right)	☐
Can't remember	2
Have not had any sexual experiences with someone of the **same** sex	3

63. How old were you when you had sexual intercourse with someone of the **same** sex for the first time? **Note:** sexual intercourse means vaginal intercourse, oral sex or anal sex.

Age (Please specify in the box to the right)	→ **Please continue**
Cannot remember	→ **Please continue**
Have not had sexual intercourse with someone of the **same** sex	→ **Please go to section five**

64. How old was your partner at the time?

Specific age (please specify in the box to the right)	☐
Older	2
Younger	3
Don't know	97

65. Was it your partner's first time or not?

Yes	1
No	2
Don't know	97

66. Did you use any form of STI protection, for example oral dam?

Yes	1
No	2

67. Remembering the first time you had sexual intercourse with someone of the **same** sex, which of the following best describes the situation with your sexual partner?

One night stand	1
Met only recently	2
Friends	3
Stable relationship	4
Rape	5
Sexual abuse	6
Other	96

68. Reflecting back on the first time you had sexual intercourse with someone of the **same** sex, which of the following applies?

I should have waited longer before having sex	1
I should not have waited so long to have sex	2
It was about the right time to have sex	3
I had no say in the matter	4

69. Reflecting back on the first time you had sexual intercourse with someone of the **same** sex, did **you** consume alcohol or any other drugs before you engaged in sexual intercourse?

No alcohol or other drugs	1
Alcohol only	2
Other drugs only	3
Both alcohol and other drugs	4

70. Reflecting back on the first time you had sexual intercourse with someone of the **same** sex, did **your partner** consume alcohol or any other drugs before you both engaged in sexual intercourse? Please circle the appropriate number below.

No alcohol or other drugs	1
Alcohol only	2
Other drugs only	3
Both alcohol and other drugs	4

Section Five: Contraception/Fertility Management and Pregnancy

71. Which of the following contraceptive methods have you and your sexual partner(s) **ever** used? Please tick all that apply.

Fertility Awareness-based Methods		Combination oral contraceptives	10
Calendar or rhythm method	1	Progestin-only contraception	
Basal body temperature method	2	*Depo Provera (injection)*	11
Cervical mucus method	3	*Progestogen-only pill/Mini pill*	12
Sympto-thermal method	4	Sterilisation Methods	
Barrier methods		*Tubal sterilisation/ligation*	13
Male condom	5	*Vasectomy*	14
Female condom	6	Post-coital contraception	
Diaphragm	7	*Emergency contraceptive pill (ECP)*	15
Vaginal spermicides	8	Withdrawal	16
Intrauterine device (IUD)	9	None	98

72. Which of the following contraceptive methods have you and your sexual partner(s) used in the **last 12 months**? Please circle all that apply.

Fertility Awareness-based Methods		Combination oral contraceptives	10
Calendar or rhythm method	1	Progestin-only contraception	
Basal body temperature method	2	*Depo Provera (injection)*	11
Cervical mucus method	3	*Progestogen-only pill/Mini pill*	12
Sympto-thermal method	4	Sterilisation Methods	
Barrier methods		*Tubal sterilisation/ligation*	13
Male condom	5	*Vasectomy*	14
Female condom	6	Post-coital contraception	
Diaphragm	7	*Emergency contraceptive pill (ECP)*	15
Vaginal spermicides	8	Withdrawal	16
Intrauterine device (IUD)	9	None	98

73. Have you or your sexual partner(s) **ever** become pregnant after using **<u>any</u>** of the contraceptive methods listed above?

Yes	1
No	2
My partner and I have never used any of the contraceptive methods listed above	3

If you answered yes, please specify which contraceptive methods here:

74. Which of the following experiences have you and a current or previous sexual partner **ever** had with a condom? Please circle all that apply.

Tearing the condom when getting it out of the packet	1	Having the condom come off inside your partner's mouth	8
Tearing it when putting it on	2	Having the condom come off inside your partner's anus	9
Having difficulty rolling down the penis	3	Decreased sensitivity during sexual intercourse	10
Keeping it on while engaging in sexual activity	4	Lost an erection while putting a condom on	11
Lost an erection while using a condom during sexual intercourse	5	Removed a condom prematurely (before ejaculating) during sexual intercourse because of losing an erection	12
Having the condom come off inside your partner's vagina	6	None	98
Having difficulty taking it off	7	Does not apply	99

75. Have you ever used a contraceptive pill of any type?

Yes	1	→ **Please continue**
No	2	→ **Please go to question 78**

76. Which of the following negative side effects have you **ever** experienced while taking a contraceptive pill? Please circle all that apply.

Weight gain	1	Bleeding between periods	13
Changes in appetite	2	Absent or lighter than normal period	14
Breast soreness and tenderness	3	Breast enlargement	15
Acne	4	Breast secretions	16
Nausea	5	Hair growth	17
Vomiting	6	Fatigue or tiredness	18
Skin changes (e.g. dark discolouration or blotchy discolouration)	7	Vaginal thrush	19
Headaches	8	Rashes or itching	20
Stomach or abdominal pain	9	Decrease in sexual desire	21
Gum inflammation	10	Moodiness or irritability	22
Severe menstrual cramps	11	None	98
Depression	12		

77. Which of the following negative side effects have you experienced while taking a contraceptive pill in the **last 12 months**? Please circle all that apply.

Weight gain	1	Bleeding between periods	13
Changes in appetite	2	Absent or lighter than normal period	14
Breast soreness and tenderness	3	Breast enlargement	15
Acne	4	Breast secretions	16
Nausea	5	Hair growth	17
Vomiting	6	Fatigue or tiredness	18
Skin changes (e.g. dark discolouration or blotchy discolouration)	7	Vaginal thrush	19
Headaches	8	Rashes or itching	20
Stomach or abdominal pain	9	Decrease in sexual desire	21
Gum inflammation	10	Moodiness or irritability	22
Severe menstrual cramps	11	None	98
Depression	12		

78. Have you **ever** experienced some difficulty in becoming pregnant?

Yes	1
No	2
Can't get pregnant because of a medical reason	3
Haven't tried to get pregnant so I don't know	4

79. Have you **ever** been pregnant?

Yes	1
No	2

If you answered yes, how many times? Please specify here:

80. Have you ever experienced any of the following with a pregnancy?

Miscarriage	1
Stillbirth	2
Premature birth	3
None of these	98

81. Have you **ever** had a pregnancy terminated?

Yes	1	→ **Please continue**
No	2	→ **Please go to question 86**

If you answered yes, please indicate the number of times you have had a pregnancy terminated. Please specify here:

82. What age were you when you had your pregnancy or pregnancies terminated? Please specify the age of each termination here:

83. Were you given any counselling before you had the pregnancy terminated?

Yes	1
No	2

84. Were you given any counselling after you had the pregnancy terminated?

Yes	1
No	2

85. Did you have any children prior to having your pregnancy terminated?

Yes	1
No	2

If you answered yes, please specify how many children you already had prior to having the pregnancy terminated. Please specify here:

Section Six: Sexually Transmitted Infections and Sexual Health

Sexually Transmitted Infections (STIs)

86. Have you ever had an STI test?

Yes	1
No	2

87. Have you ever had an HIV test?

Yes	1
No	2

88. Have you ever had a sexually transmitted infection (STI)?

Yes	1
No	2

89. Have you ever had a sexually transmitted infection (STI)?

Yes	1	→ **Please continue**
No	2	→ **Please go to question 93**

90. Which of the STIs listed in the table below have you **ever** had? Please circle all that apply.

Chlamydia	1	Scabies	7
Genital herpes	2	Syphilis	8
Genital warts	3	Trichomoniasis	9
Gonorrhoea	4	Mycoplasma	10
Non-specific Urethritis	5	None	98
Pubic lice	6		

91. Which of the STIs listed in the table below have you had in the **last 12 months**? Please circle all that apply.

Chlamydia	1	Scabies	7
Genital herpes	2	Syphilis	8
Genital warts	3	Trichomoniasis	9
Gonorrhoea	4	Mycoplasma	10
Non-specific Urethritis	5	None	98
Pubic lice	6		

92. Did you tell your current and previous sexual partner(s) that you had an STI?

Yes	1
No	2

Sexual Health

93. Do you check your breasts regularly for any unusual lumps?

Yes	1
No	2

94. Do you have regular gynaecological examinations performed by a medical professional?

Yes	1
No	2

95. Have you **ever** had a mammogram?

Yes	1
No	2

If you answered yes, when was the last time you had a mammogram?
Please specify the year you had your mammogram here:

96. Do you have your period regularly?

Yes	1
No	2

If you answered yes, do you experience any of the following symptoms before, during or after your period? Please circle all the numbers that apply.

Breast tenderness	1	Joint pain	13
Fluid retention	2	Tension and irritability	14
Bloating in the abdomen, hands or legs	3	Difficulty concentrating	15
Headache	4	Crying for no apparent reason	16
Fatigue or exhaustion	5	Difficulty sleeping	17
Decrease in desire for sex	6	Anger	18
Pimples	7	Sadness	19
Constipation	8	Food cravings (e.g. chocolate)	20
Fast heartbeat	9	Breast enlargement	21
Wanting to be alone	10	Severe and disabling pain that can last up to two days	22
Abdominal cramping	11	None	98
Weight gain	12		

97. Have you **ever** had any the following sexual health issues diagnosed by a medical professional? Please circle all that apply.

Benign (not cancerous) lump on your breast	1	Cervical dysplasia	8
Bacterial Vaginosis	2	Endometriosis	9
Toxic shock syndrome (TSS)	3	Endometrial cancer	10
Urinary tract infection (UTI)	4	Cervical cancer	11
Thrush or candidiasis	5	Breast cancer	12
Ovarian cysts	6	Ovarian cancer	13
Vulvitis	7	None	98

98. Have you had any of the following sexual health issues diagnosed by a medical professional in the **last 12 months**? Please circle all the numbers that apply.

Benign (not cancerous) lump on your breast	1	Cervical dysplasia	8
Bacterial Vaginosis	2	Endometriosis	9
Toxic shock syndrome (TSS)	3	Endometrial cancer	10
Urinary tract infection (UTI)	4	Cervical cancer	11
Thrush or candidiasis	5	Breast cancer	12
Ovarian cysts	6	Ovarian cancer	13
Vulvitis	7	None	98

99. How often do you wear a bra to support your breasts during the day?

Always	Usually	Sometimes	Rarely	Never
1	2	3	4	5

100. How often do you wear a bra to support your breasts while you sleep during the night?

Always	Usually	Sometimes	Rarely	Never
1	2	3	4	5

Section Seven: Sexual Functioning

101. Have you **ever** experienced any of the following sexual functioning issues? Please circle all the numbers that apply.

Regular lack of desire or interest for sexual activity	1	Regular involuntary spasm of the muscles in the vagina, which interferes with sexual intercourse	4
Regular avoidance of all or almost all sexual contact with a sexual partner	2	Regular inability to achieve orgasm through masturbation or sexual intercourse	5
Regular lack of physical or emotional response to erotic stimulation	3	None	98

102. Have you experienced any of the following sexual functioning issues in the **last 12 months**? Please circle all the numbers that apply.

Regular lack of desire or interest for sexual activity	1	Regular involuntary spasm of the muscles in the vagina, which interferes with sexual intercourse	4
Regular avoidance of all or almost all sexual contact with a sexual partner	2	Regular inability to achieve orgasm through masturbation or sexual intercourse	5
Regular lack of physical or emotional response to erotic stimulation	3	None	98

Section Eight: Lifetime Sexual Activity

Masturbation

103. Have you ever masturbated?

Yes	1	→ **Please continue**
No	2	→ **Please go to question 107**

104. How old were you when you first started masturbating? Please specify here:

105. While growing up, did your masturbating behaviour ever result in difficulties between you and your parents or caregivers?

Yes	1
No	2

106. Has your masturbating behaviour **ever** resulted in difficulty between you and a previous or current sexual partner?

Yes	1
No	2

Pornography

107. Have you ever viewed pornography?

Yes	1	→ **Please continue**
No	2	→ **Please go to question 112**

108. Which of the following forms of pornography have you **ever** used? Please circle all that apply.

Magazine	1	Internet	5
Audiotape	2	Telephone	6
Video	3	Pay TV	7
DVD	4	None	98

109. Have you ever viewed pornography with a previous or current sexual partner?

Yes	1
No	2

110. Do you pay for the pornography you view?

Yes	1
No	2
Sometimes	3

111. Has viewing pornography ever resulted in difficulties between you and a previous or current sexual partner?

Yes	1
No	2

Sex Toys

112. Have you ever used a sex toy?

Yes	1	→ **Please continue**
No	2	→ **Please go to question 115**

113. Which of the following sex toys have you ever used? Please circle all that apply.

Dildo	1	Pocket vagina (vibrating)	7
Penis ring	2	Anal beads	8
Vibrator	3	Nipple clamps	9
Bondage restraints (e.g. handcuffs, whips)	4	Blow up doll	10
Pocket vagina (non-vibrating)	5	None	98
Butt plug	6		

114. Has using a sex toy ever resulted in difficulties between you and a previous or current sexual partner?

Yes	1
No	2

Sexual Experiences

115. How many sexual partner(s) have you had in your lifetime? Please circle the numbers that apply.

1-5	6-10	11-15	16-20	21-25	26-30
31-35	36-40	41-45	46-50	51-59	60+

116. Have you **ever** experienced the following? Please circle all the numbers that apply.

Oral Sex	1
Vaginal Sex	2
Anal Sex	3
Group Sex	4
Swinging	5
None of these	98

Section Nine: Variations in Sexual Thoughts and Behaviour

Sexual Appearance

117. Have you ever cut or shaved your pubic hair?

Yes	1
No	2

118. Have you ever had your nipples pierced?

Yes	1
No	2

119. Have you ever had your genitals pierced?

Yes	1
No	2

120. Have you ever had breast implants?

Yes	1
No	2

121. Have you ever had a breast reduction?

Yes	1
No	2

122. Have you ever had female genital cosmetic surgery (FGCS)?

Yes	1
No	2

123. Have you ever had sex reassignment surgery?

Yes	1
No	2

Sexual Fantasy

Note: for the purposes of this section a sexual fantasy is defined as a sexually arousing thought or mental image.

124. Have you ever had a sexual fantasy of any type?

Yes	1	→ **Please continue**
No	2	→ **Please go to question 128**

125. Have you ever had sexual fantasies involving the following? Please circle all that apply.

A celebrity	1	Pain	12
An authoritative figure (e.g. teacher, lecturer, politician)	2	Being submissive	13
Your partner's sibling	3	Being dominant	14
Your partner's friend	4	Having sex with animals	15
Having sex with inappropriate people (e.g. a family member, a child)	5	Sex in a public place	16
A person in uniform (e.g. police officer, nurse, doctor)	6	Romantic massage	17
Someone younger	7	Someone older	18
Your therapist	8	Being watched while having sex	19
A threesome	9	Being rescued	20
Group sex	10	Forced sexual intercourse	21
Complete stranger	11	None	98

126. Have you ever shared your sexual fantasies with a previous or current sexual partner?

Yes	1
No	2

127. Have your sexual fantasies ever caused any difficulties between you and a previous or current sexual partner?

Yes	1
No	2

Extradyadic Sexual Involvement

128. While with a previous or current primary sexual partner, have you ever had sexual intercourse (includes vaginal, oral, or anal sex) with someone else without your primary sexual partner knowing?

Yes	1
No	2

129. Have you ever found that your previous or current sexual partner was having sexual intercourse (includes vaginal intercourse, oral sex or anal sex) with another person while they were involved in a relationship with you?

Yes	1
No	2

Sexual Curiosity

130. Have you ever become aroused at the thought of a previous or current sexual partner having sexual intercourse with someone else?

Yes	1
No	2

131. Have you ever arranged for a previous or current sexual partner to have sexual intercourse with another person?

Yes	1
No	2

132. Have you ever participated in a threesome?

Yes	1
No	2

133. Have you ever engaged in partner swapping or swinging?

Yes	1
No	2

134. Have you ever had an open relationship? An open relationship in this sense is where you and your partner have agreed that it is ok to be sexually involved with other people while in the relationship.

Yes	1
No	2

135. Have you ever had an open relationship? An open relationship in this sense is where you and your partner have agreed that it is ok to be sexually involved with other people while in the relationship.

Dressed in clothing worn by the opposite sex	1
Inflicted or received pain during sexual activity	2
Needed an inanimate object (e.g. leather, fur) present during sexual activity in order to become sexually excited and achieve an orgasm	3
Performed an act of exhibitionism (e.g. exposing yourself in public or making obscene telephone calls)	4
Secretly observed others engaging in sexual activity	5
Obtained sexual pleasure by rubbing yourself against another non-consenting person	6
None of these	97

Victim of a Sexual Crime

136. While you were a child, did an adult ever force you to engage in sexual activity of any kind?

Yes	1
No	2

If you answered yes, was this reported to the police?

Yes	1
No	2

137. As an adult, have you ever been forced to have sexual intercourse (includes vaginal, oral and anal sex) by another adult? Forced in this situation means that you did not agree to or consent to the sexual intercourse.

Yes	1
No	2

If you answered yes, did you report this event to the police?

Yes	1
No	2

Section Ten: Current Sexual Activity

Masturbation

138. In the last 12 months how often would you say you masturbated?

Did not masturbate	1	→ **Please go to question 145**
Less than once a month	2	→ **All other responses please continue**
Once a month	3	
2-3 times per month	4	
Once per week	5	
2-3 times week	6	
4-6 times week	7	
Once daily	8	
More than once daily	9	
Varied too often to say	10	

139. In the last 12 months how often would you say you felt guilty when you masturbated? Please circle the number that applies.

Never	Rarely	Sometimes	Usually	Always
1	2	3	4	5

140. Thinking about your masturbating behaviour over the last 12 months, which of the following reasons would you usually give for masturbating? Please circle all that apply.

To relieve sexual tension	1
To relax	2
I did not have a sexual partner	3
My sexual partner did not want to have sexual intercourse with me	4
To get to sleep	5
My sexual partner asked me to so that he/she could watch	6
I had nothing else to do	7
Did not have a condom and was not sure of my sexual partner's STI status	8
Other (please specify)	96

141. In the last 12 months how often would you say **you were** masturbated by a sexual partner?

Have not had a sexual partner in the last 12 months	1
Was not masturbated by a sexual partner	2
Less than once a month	3
Once a month	4
2-3 times per month	5
Once per week	6
2-3 times week	7
4-6 times week	8
Once daily	9
More than once daily	10
Varied too often to say	11

142. In the last 12 months how often would you say **you** masturbated a sexual partner?

Have not had a sexual partner in the last 12 months	1
Didn't masturbate a sexual partner	2
Less than once a month	3
Once a month	4
2-3 times per month	5
Once per week	6
2-3 times week	7
4-6 times week	8
Once daily	9
More than once daily	10
Varied too often to say	11

143. In the last 12 months how often would you say you used pornographic material when you masturbated?

Did not use pornographic material when I masturbated	1
Less than once a month	2
Once a month	3
2-3 times per month	4
Once per week	5
2-3 times week	6
4-6 times week	7
Once daily	8
More than once daily	9
Varied too often to say	10

144. In the last 12 months how often would you say you used a sex toy when you masturbated?

Did not use a sex toy	1
Less than once a month	2
Once a month	3
2-3 times per month	4
Once per week	5
2-3 times week	6
4-6 times week	7
Once daily	8
More than once daily	9
Varied too often to say	10

Pornography Use

145. In the last 12 months how often would you say you used pornography?

Did not use pornography	1	→ **Please go to question 149**
Less than once a month	2	→ **All other responses please continue**
Once a month	3	
2-3 times per month	4	
Once per week	5	
2-3 times week	6	
4-6 times week	7	
Once daily	8	
More than once daily	9	
Varied too often to say	10	

146. In the last 12 months how often would you say you felt guilty when you used pornography? Please circle the number that applies.

Never	Rarely	Sometimes	Usually	Always
1	2	3	4	5

147. Thinking about your use of pornography over the last 12 months, which of the following reasons would you usually give for using pornography? Please circle all that apply.

To relieve sexual tension	1
To relax	2
I did not have a sexual partner	3
My sexual partner did not want to have sexual intercourse with me	4
To get to sleep	5
My sexual partner asked me to watch it with them	6
Did not have a condom and was not sure of my sexual partner's STI status	7
I had nothing else to do	8
Other	96

148. In the last 12 months how often would you say you viewed pornography with a sexual partner?

Have not had a sexual partner in the last 12 months	1
Did not view pornography with a sexual partner	2
Less than once a month	3
Once a month	4
2-3 times per month	5
Once per week	6
2-3 times week	7
4-6 times week	8
Once daily	9
More than once daily	10
Varied too often to say	11

Sex Toy Use

149. In the last 12 months how often would you say you used a sex toy **by yourself**?

Did not use a sex toy by myself	1	→ **Please go to question 153**
Less than once a month	2	→ **All other responses please continue**
Once a month	3	
2-3 times per month	4	
Once per week	5	
2-3 times week	6	
4-6 times week	7	
Once daily	8	
More than once daily	9	
Varied too often to say	10	

150. In the last 12 months how often would you say you felt guilty when you used a sex toy? Please circle the number that applies.

Never	Rarely	Sometimes	Usually	Always
1	2	3	4	5

151. Thinking about your sex toy use over the last 12 months, which of the following reasons would you usually give for using a sex toy? Please circle all the numbers that apply.

To relieve sexual tension	1
To relax	2
I did not have a sexual partner	3
My sexual partner did not want to have sexual intercourse with me	4
To get to sleep	5
My sexual partner asked me to so that he/she could watch	6
I had nothing else to do	7
Did not have a condom and was not sure of my sexual partner's STI status	8
Other (please specify)	99

152. In the last 12 months how often would you say you used a sex toy with a sexual partner?

Have not had a sexual partner in the last 12 months	1
Did not use a sex toy with a sexual partner	2
Less than once a month	3
Once a month	4
2-3 times per month	5
Once per week	6
2-3 times week	7
4-6 times week	8
Once daily	9
More than once daily	10
Varied too often to say	11

Sexual Intercourse

153. Have you had vaginal intercourse, oral sex or anal sex in the last 12 months?

Yes	1	→ **Please continue**
No	2	→ **Please go to section 11**

154. How many sexual partners have you had in the last 12 months? Please circle the numbers that apply.

1-3 4-6 7-10 11-15 16+

155. In the last 12 months how often would you say you had vaginal intercourse?

Did not have vaginal intercourse	1
Less than once a month	2
Once a month	3
2-3 times per month	4
Once per week	5
2-3 times week	6
4-6 times week	7
Once daily	8
More than once daily	9

156. In the last 12 months how often would you say you have received oral sex?

Did not receive oral sex	1
Less than once a month	2
Once a month	3
2-3 times per month	4
Once per week	5
2-3 times week	6
4-6 times week	7
Once daily	8
More than once daily	9

157. In the last 12 months how often would you say you have given oral sex?

Did not give oral sex	1
Less than once a month	2
Once a month	3
2-3 times per month	4
Once per week	5
2-3 times week	6
4-6 times week	7
Once daily	8
More than once daily	9

158. In the last 12 months how often would you say you had anal sex where you were the receiver?

Did not have anal sex where I was the receiver	1
Less than once per week	2
1-3 times per week	3
4-5 times per week	4
Once daily	5
More than once daily	6

159. In the last 12 months how often would you say you had anal sex where you were the giver (e.g. through the use of a strap-on dildo)?

Did not have anal sex where I was the giver	1
Less than once per week	2
1-3 times per week	3
4-5 times per week	4
Once daily	5
More than once daily	6

160. In the last 12 months how often have you used protection against sexually transmitted infections (STIs) when having sexual intercourse?

Always	Usually	Sometimes	Rarely	Never	Doesn't Apply
1	2	3	4	5	6

161. In the last 12 months how often would you say you and your sexual partner(s) used contraception to avoid pregnancy?

Always	Usually	Sometimes	Rarely	Never
1	2	3	4	5

162. In the last 12 months how often would you say you usually spent on acts of foreplay?

0-5 minutes	6-10 minutes	11-20 minutes	21-29 minutes	30 + minutes
1	2	3	4	5

163. In the last 12 months how often would you say **you** achieved an orgasm when having sexual intercourse?

Always	Usually	Sometimes	Rarely	Never
1	2	3	4	5

164. In the last 12 months how often would you say **your sexual partner(s)** achieved an orgasm when having sexual intercourse?

Always	Usually	Sometimes	Rarely	Never
1	2	3	4	5

165. In the last 12 months how often would you say **you** faked an orgasm?

Always	Usually	Sometimes	Rarely	Never
1	2	3	4	5

166. In the last 12 months how often would you say **your sexual partner(s)** faked an orgasm?

Always	Usually	Sometimes	Rarely	Never
1	2	3	4	5

167. In the last 12 months have you had a one-night stand?

Yes	1
No	2

If you answered yes, please indicate how many by placing a tick in the appropriate box below.

One	Two	Three	Four	Five or more
1	2	3	4	5

168. In the last 12 months have you turned down the opportunity to have sexual intercourse with someone who was not your primary sexual partner?

Yes	1
No	2

If you answered yes, please identify which of the following indicates why? Please circle all that apply.

We did not have any condoms	1
It was the first time we had met	2
I only have sex with a person only when I truly know them	3
I was not in the mood	4
I did not find the person attractive enough	5
I had doubts about their sexual health status	6
I was already involved with someone	7
I knew that he/she was already involved with another person	8
Other (please specify):	99

169. In the last 12 months have you had sexual intercourse with a person who was not your primary sexual partner?

Yes	1
No	2

170. In the last 12 months have you agreed to unwanted sexual activity or sexual intercourse with a current or previous sexual partner?

Yes	1
No	2

If you answered yes, which of the following best describes why? Please circle the number that applies.

Satisfy sexual partner's needs to enhance intimacy	1
Avoid relationship tension and conflict	2
Felt obligated because of previous sexual history with this person	3
It was usual in the relationship to engage in sex regularly	4
Unable to say no	5
Other (please specify):	6

171. In the last 12 months have you had sexual intercourse with a prostitute?

Yes	1
No	2

If you answered yes, please indicate the number of times. Please circle the appropriate number below.

One	Two	Three	Four	Five or more
1	2	3	4	5

172. In the last 12 months how often would you say you had sexual intercourse with someone of the **same** sex?

Didn't have sexual intercourse with someone of the same sex	1
Less than once a month	2
Once a month	3
2-3 times per month	4
Once per week	5
2-3 times week	6
4-6 times week	7
Once daily	8
More than once daily	9
Varied too often to say	10

Section Eleven: Survey Feedback

Did you like doing this survey? Please circle one.

Yes No

Overall, were the questions in this survey easy or hard to understand? Please circle one below.

Easy Hard

What did you think about the length of the survey? Please circle one below.

Too short About right Too long

Appendix E – Male Questionnaire

1. What is your age? Please specify here:

2. What is your sex?

Female	1
Male	2
Intersex	3
Other	96

3. Which of the following best describes your employment status?

Unemployed	1
Full-time	2
Part-time	3
Casual	4
Beneficiary	5
Voluntary	6
Student	7

4. Which one of the following areas would you say your occupation best belongs to?

Agriculture, Horticulture, Forestry, Seafood and Mining	1
Transport and Storage	2
Health and Community Services	3
Engineering	4
Tourism and Hospitality	5
Retail, Wholesale and International Trade	6
Finance and Insurance	7
Communications	8
Administration, Business and Property Services	9
Cultural, Information and Recreation Services	10
Construction, Electricity, Gas and Water Supply	11
Education and Social Services	12
Personal, Protection and Legal Services	13
Government Administration and Defence	14
Manufacturing	15
Other	96

5. Which of the following best describes your relationship status?

Single	1
Dating	2
De Facto	3
Married	4
Separated	5
Divorced	6
Widowed	7

6. Which one of the following best describes your annual household income?

$10,000 or below	1
$10,001-$20,000	2
$20,001-$30,000	3
$30,001-$40,000	4
$40,001-$50,000	5
$50,001-$60,000	6
$60,001 +	7

7. Which country were you born in? Please specify here:

8. Which of the following ethnic groups do you identify with? Please circle the numbers that apply below or you can specify the exact ethnic group(s) you identify with in the space provided below.

NZ European	1	Other Pacific Island	8
NZ Maori	2	Indian	9
Other European	3	Chinese	10
Samoan	4	Other Asian	11
Tongan	5	American	12
Fijian	6	Latin American	13
Cook Island	7		

Other, please specify here:

9. Which of the following best describes your living arrangements?

Living alone	1
Boarding	2
Flatting	3
Living with parents	4
Adult living with partner	5
Adult living with partner and child/children	6
Adult living with child/children	7

10. What is the highest qualification you have achieved?

School Certificate/NCEA Level 1	1
Six Form Certificate/ Higher School Certificate/NCEA Level 2	2
University Entrance/Bursary/NCEA Level 3	3
Undergraduate Certificate	4
Undergraduate Diploma	5
Bachelors Degree	6
Honours Degree	7
Postgraduate Certificate	8
Postgraduate Diploma	9
Graduate Certificate	10
Graduate Diploma	11
Master's Degree	12
PhD	13
Post PhD/Post Doctoral	14
None	98

11. Which of the following statements best describes your sexual orientation?

I am attracted to individuals of the **opposite** sex	1
I am attracted to individuals of the **same** sex	2
I am attracted to individuals of **both** sexes	3
I am not attracted to individuals of **either** sex	4
None	98

12. How important is religion to you?

Very important	Fairly important	Neutral	Not very important	Not important at all
1	2	3	4	5

13. Please specify the name of any religion you are affiliated with in the space provided below. If you are not affiliated with any religion please write **Nil** in the space provided.

Religion:_____

14. How often do you attend religious services or meetings?

Once a week or more	1
At least once every 2 weeks	2
At least once a month	3
At least twice a year	4
At least once a year	5
Varies	6
Never	7

General Health Status

15. What is your opinion of your current general health?

Very Good	Good	Fair	Bad	Very Bad
1	2	3	4	5

16. Do you have a long-term health illness, health problem or disability which limits your daily activities, your socialising with others or the work you can do?

Yes	1
No	2

If you answered yes, please specify which here:

17. Have you been diagnosed as having a mental health disorder by a G.P., psychiatrist or psychologist within the last 12 months?

Yes	1
No	2

If you answered yes, please specify which here:

18. Have you been admitted to hospital in the last 12 months?

Yes	1
No	2

If you answered yes, please specify why here:

19. Have you had an operation in the last 12 months?

Yes	1
No	2

If you answered yes, please specify why here:

20. Are you on any medications currently?

Yes	1
No	2

If you answered yes, please specify which (including the dosage) here:

21. In the last 12 months how often would you say you had a drink containing alcohol?

5 or more days a week	1
3-4 days a week	2
1-2 days a week	3
1-2 times per month	4
1-2 times in the last 12 months	5
Not at all in the last 12 months	6
Varied too much to say	7

22. How many drinks containing alcohol do you have on a typical day when you do drink?

I don't drink	1
1-2	2
3-4	3
5-6	4
7-9	5
10 or more	6

23. Have you ever smoked cigarettes regularly (at least 1 a day)?

Yes	1
No	2

24. Do you smoke cigarettes currently?

Yes	1
No	2

If you answered yes, how many cigarettes do you smoke in a typical day? Please specify here:

25. Have you taken any illegal drug(s) in the last 12 months?

Yes	1
No	2

If you answered yes, please specify how often you would use the drug(s):

26. What is your current weight in kilograms? Please specify here:

27. What is your height in centimetres? Please specify here:

Section Two: Attitudes to Sex and Relationships

Please provide your opinions on the following topics. Please circle the appropriate cell.

28. Sex before marriage is…

Not wrong at all	Sometimes wrong	Almost Always wrong	Always wrong	No opinion
1	2	3	4	94

29. Sex before the age of 16 is…

Not wrong at all	Sometimes wrong	Almost Always wrong	Always wrong	No opinion
1	2	3	4	94

30. Sexual activity and intercourse between consenting adults of the same sex is…

Not wrong at all	Sometimes wrong	Almost Always wrong	Always wrong	No opinion
1	2	3	4	94

31. Sexual intercourse with a person without being in love with them is…

Not wrong at all	Sometimes wrong	Almost Always wrong	Always wrong	No opinion
1	2	3	4	94

32. Being romantically and sexually involved with one person and having sexual intercourse with someone else is…

Not wrong at all	Sometimes wrong	Almost Always wrong	Always wrong	No opinion
1	2	3	4	94

33. Masturbation is…

Not wrong at all	Sometimes wrong	Almost Always wrong	Always wrong	No opinion
1	2	3	4	94

34. Sale of pornography to adults is…

Not wrong at all	Sometimes wrong	Almost Always wrong	Always wrong	No opinion
1	2	3	4	94

35. Having unprotected sexual intercourse when you do not know both your and your sexual partner's HIV and STI status is…

Not wrong at all	Sometimes wrong	Almost Always wrong	Always wrong	No opinion
1	2	3	4	94

36. Having sex with someone important in an organisation to get a job there is…

Not wrong at all	Sometimes wrong	Almost Always wrong	Always wrong	No opinion
1	2	3	4	94

37. Having sex with your boss to improve your position in the organisation is…

Not wrong at all	Sometimes wrong	Almost Always wrong	Always wrong	No opinion
1	2	3	4	94

38. Making my sexual partner orgasm during sex is…

Very important	Fairly important	Neutral	Not very important	Not important at all
1	2	3	4	5

39. Prostitution is…

Not wrong at all	Sometimes wrong	Almost Always wrong	Always wrong	No opinion
1	2	3	4	94

40. Is the government doing enough to make free internet porn less accessible to children and adolescents?

Yes	No	I am not sure	No opinion
1	2	3	94

41. Sexual activity and intercourse promotes human health and well-being?

Strongly agree	Agree	Not sure	Disagree	Strongly Disagree	No opinion
1	2	3	4	5	94

42. Should the termination of unwanted pregnancies be allowed?

No	1
Yes	2
Yes, but only in certain situations (e.g. rape)	3
I am not sure	4
No opinion	94

43. How important are each of the following to a successful marriage or relationship? Please rate each item below using the following key:

1 = very important
2 = fairly important
3 = neutral
4 = not very important
5 = not important at all

Sharing household duties	
Faithfulness	
Adequate Income	
Mutual respect and appreciation	
Shared religious beliefs	
Happy sexual relationship	
Having children	
Similar tastes and interests	
Physical attraction	
Spending quality time together	
Tolerance and acceptance	
Good communication	

No opinion 94

44. Which of the following situations would you classify as cheating on one's primary partner? Please circle all that apply.

Situation	Yes this is cheating on one's partner	No this is not cheating on one's partner
Close contact with another person who is not your primary partner (e.g. hugging, holding hands)	1	2
Having sexual thoughts about another person who is not your primary partner	1	2
Kissing another person who is not your primary partner	1	2
Touching intimate areas of another person who is not your primary partner (e.g. chest, penis, vagina, buttocks)	1	2
Oral intercourse of another person who is not your primary partner	1	2
Complete intercourse (heterosexual or homosexual) with another person who is not your primary partner	1	2

Section Three: Sexual Knowledge and Education

45. During your childhood and adolescence did you find it easy or difficult to talk about sexual matters with a parent or caregiver?

Easy	1
Difficult	2
Did not discuss sexual matters	3

46. When growing up which of the following ways did you learn about sex?

Parent	1	Sexual education at school	7
Caregiver	2	Movies	8
Siblings	3	Television	9
Cousins	4	Pornography	10
Friends	5	Doctor or nurse	11
Counsellor, psychologist, or social worker	6	First sexual partner	12

47. Should sexuality education be included in the Health curriculum in school?

Yes	1
No	2

If you answered yes, what age do you think sexuality education should be first taught at in school? Please specify here:

48. Remembering the time when you were taught sex education at school, how useful did you find this education?

Absolutely useful	Very useful	Neutral	Not very useful	Absolutely useless	Non Applicable
1	2	3	4	5	95

49. Which of the following topics **were** taught as part of the sexuality education curriculum when you were at school? Please circle all that apply.

General human development	1	Sexual decision making and pressure	10	Intimacy	19
Biological sexual development	2	Sexual response cycle	11	Love	20
Male and female sexual anatomy	3	Sexual dysfunction	12	Contraception	21
Male and female sexual health	4	Sex and alcohol	13	Abortion	22
Conception, pregnancy and childbirth	5	Sex and other drugs	14	Abstinence	23
Sexually transmitted infections (STIs)	6	Rape and its effects	15	Values	24
Sexual orientation and its diversity	7	Sexual abuse and its effects	16	Gender Roles	25
Culture and sexuality	8	Masturbation is not harmful	17	Infertility	26
Sexuality and disability	9	Relationship and communication skills	18		

50. Which of the following topics **should** be taught as part of the sexuality education curriculum at school? Please circle all that apply.

General human development	1	Sexual decision making and pressure	10	Intimacy	19
Biological sexual development	2	Sexual response cycle	11	Love	20
Male and female sexual anatomy	3	Sexual dysfunction	12	Contraception	21
Male and female sexual health	4	Sex and alcohol	13	Abortion	22
Conception, pregnancy and childbirth	5	Sex and other drugs	14	Abstinence	23
Sexually transmitted infections (STIs)	6	Rape and its effects	15	Values	24
Sexual orientation and its diversity	7	Sexual abuse and its effects	16	Gender Roles	25
Culture and sexuality	8	Masturbation is not harmful	17	Infertility	26
Sexuality and disability	9	Relationship and communication skills	18		

Section Four: First Sexual Experiences

First Heterosexual Experience

51. How old were you when you had your first sexual experience with someone of the **opposite** sex? **Note:** sexual experience could be any activity of a sexual nature apart from sexual intercourse, oral sex, anal sex, for example kissing, touching of the genitals, or close body contact.

Age (please specify in the box to the right)	☐
Cannot remember	2
Have not had any sexual experiences with someone of the **opposite** sex	3

52. How old were you when you had sexual intercourse with someone of the **opposite** sex for the first time? **Note:** sexual intercourse means vaginal intercourse, oral sex or anal sex.

Age (please specify in the box to the right)	☐	→ **Please continue**
Cannot remember	2	→ **Please continue**
Have not had sexual intercourse with someone of the **opposite** sex	3	→ **Please go to question 60**

53. How old was your partner at the time?

Specific age (please specify in the box to the right)	
Older	2
Younger	3
Don't know	4

54. Was it your partner's first time or not?

Yes	1
No	2
Don't know	3

55. Did you use any form of contraception?

Yes	1
No	2

If you answered yes, which of the following? Please circle all that apply.

Condom	1
The pill	2
Withdrawal	3
Calendar method	4
Diaphragm	5
Other contraceptive method	6

56. Remembering the first time you had sexual intercourse with someone of the **opposite** sex, which of the following best describes the situation with your sexual partner?

One night stand	1
Met only recently	2
Friends	3
Stable relationship	4
Unmarried (defacto) couple living together	5
Engaged to be married	6
Married	7
Rape	8
Sexual abuse	9
Other	96

57. Remembering the first time you had sexual intercourse with someone of the **opposite** sex, which of the following applies?

I should have waited longer before having sex	1
I could have had sex earlier	2
It was about the right time to have sex	3
I had no say in the matter	4

58. Remembering the first time you had sexual intercourse with someone of the **opposite** sex, did **you** consume alcohol or any other drugs before you engaged in sexual intercourse?

No alcohol or other drugs	1
Alcohol only	2
Other drugs only	3
Both alcohol and other drugs	4

59. Remembering the first time you had sexual intercourse with someone of the **opposite** sex, did **your partner** consume alcohol or any other drugs before you both engaged in sexual intercourse?

No alcohol or other drugs	1
Alcohol only	2
Other drugs only	3
Both alcohol and other drugs	4

First Homosexual Experience

60. How old were you when you had your first sexual experience with someone of the **same** sex as you? **Note:** sexual experience could be any activity of a sexual nature apart from sexual intercourse, for example kissing, touching of the breasts or genitals, or close body contact.

Age (please specify in the box to the right)	
Can't remember	2
Have not had any sexual experiences with someone of the **same** sex	3

61. How old were you when you had sexual intercourse with someone of the **same** sex for the first time? **Note:** sexual intercourse means vaginal intercourse, oral sex or anal sex.

Age (Please specify in the box to the right)	→ **Please continue**
Cannot remember	→ **Please continue**
Have not had sexual intercourse with someone of the **same** sex	→ **Please go to section five**

62. How old was your partner at the time?

Specific age (please specify in the box to the right)	☐
Older	2
Younger	3
Don't know	97

63. Was it your partner's first time or not?

Yes	1
No	2
Don't know	97

64. Did you use any form of STI protection, for example oral dam?

Yes	1
No	2

65. Remembering the first time you had sexual intercourse with someone of the **same** sex, which of the following best describes the situation with your sexual partner?

One night stand	1
Met only recently	2
Friends	3
Stable relationship	4
Rape	5
Sexual abuse	6
Other	96

66. Reflecting back on the first time you had sexual intercourse with someone of the **same** sex, which of the following applies?

I should have waited longer before having sex	1
I should not have waited so long to have sex	2
It was about the right time to have sex	3
I had no say in the matter	4

67. Reflecting back on the first time you had sexual intercourse with someone of the **same** sex, did **you** consume alcohol or any other drugs before you engaged in sexual intercourse?

No alcohol or other drugs	1
Alcohol only	2
Other drugs only	3
Both alcohol and other drugs	4

68. Reflecting back on the first time you had sexual intercourse with someone of the **same** sex, did **your partner** consume alcohol or any other drugs before you both engaged in sexual intercourse? Please circle the appropriate number below.

No alcohol or other drugs	1
Alcohol only	2
Other drugs only	3
Both alcohol and other drugs	4

Section Five: Contraception/Fertility Management and Pregnancy

69. Which of the following contraceptive methods have you and your sexual partner(s) **ever** used? Please tick all that apply.

Fertility Awareness-based Methods		Combination oral contraceptives	10
Calendar or rhythm method	1	Progestin-only contraception	
Basal body temperature method	2	*Depo Provera (injection)*	11
Cervical mucus method	3	*Progestogen-only pill/Mini pill*	12
Sympto-thermal method	4	Sterilisation Methods	
Barrier methods		*Tubal sterilisation/ligation*	13
Male condom	5	*Vasectomy*	14
Female condom	6	Post-coital contraception	
Diaphragm	7	*Emergency contraceptive pill (ECP)*	15
Vaginal spermicides	8	Withdrawal	16
Intrauterine device (IUD)	9	None	98

70. Which of the following contraceptive methods have you and your sexual partner(s) used in the **last 12 months**? Please circle all that apply.

Fertility Awareness-based Methods		Combination oral contraceptives	10
Calendar or rhythm method	1	Progestin-only contraception	
Basal body temperature method	2	*Depo Provera (injection)*	11
Cervical mucus method	3	*Progestogen-only pill/Mini pill*	12
Sympto-thermal method	4	Sterilisation Methods	
Barrier methods		*Tubal sterilisation/ligation*	13
Male condom	5	*Vasectomy*	14
Female condom	6	Post-coital contraception	
Diaphragm	7	*Emergency contraceptive pill (ECP)*	15
Vaginal spermicides	8	Withdrawal	16
Intrauterine device (IUD)	9	None	98

71. Have you or your sexual partner(s) **ever** become pregnant after using **<u>any</u>** of the contraceptive methods listed above?

Yes	1
No	2
My partner and I have never used any of the contraceptive methods listed above	3

If you answered yes, please specify which contraceptive methods here:

72. Which of the following experiences have you and a current or previous sexual partner **ever** had with a condom? Please circle all that apply.

Tearing the condom when getting it out of the packet	1	Having the condom come off inside your partner's mouth	8
Tearing it when putting it on	2	Having the condom come off inside your partner's anus	9
Having difficulty rolling down the penis	3	Decreased sensitivity during sexual intercourse	10
Keeping it on while engaging in sexual activity	4	Lost an erection while putting a condom on	11
Lost an erection while using a condom during sexual intercourse	5	Removed a condom prematurely (before ejaculating) during sexual intercourse because of losing an erection	12
Having the condom come off inside your partner's vagina	6	None	98
Having difficulty taking it off	7	Does not apply	99

Section Six: Sexually Transmitted Infections and Sexual Health

Sexually Transmitted Infections (STIs)

73. Have you ever had an STI test?

Yes 1
No 2

74. Have you ever had an HIV test?

Yes 1
No 2

75. Have you ever had a sexually transmitted infection (STI)?

Yes 1 → **Please continue**
No 2 → **Please go to question 79**

76. Which of the STIs listed in the table below have you **ever** had? Please circle all that apply.

Chlamydia	1	Scabies	7
Genital herpes	2	Syphilis	8
Genital warts	3	Trichomoniasis	9
Gonorrhoea	4	Mycoplasma	10
Non-specific Urethritis	5	None	98
Pubic lice	6		

77. Which of the STIs listed in the table below have you had in the **last 12 months**? Please circle all that apply.

Chlamydia	1	Scabies	7
Genital herpes	2	Syphilis	8
Genital warts	3	Trichomoniasis	9
Gonorrhoea	4	Mycoplasma	10
Non-specific Urethritis	5	None	98
Pubic lice	6		

78. Did you tell your current and previous sexual partner(s) that you had an STI?

Yes	1
No	2

Sexual Health

79. Do you check your testicles regularly for any unusual lumps?

Yes	1
No	2

80. Have you ever had a prostate check performed by a medical professional?

Yes	1
No	2

81. Have you **ever** had any of the following sexual health issues diagnosed by a medical professional? Please circle all the numbers that apply.

Prostatitis	1	Peyronie's disease	6
Epididymitis	2	Phimosis	7
Orchitis	3	Prostate cancer	8
Balanitis	4	Testicular cancer	9
Balanoposthitis	5	None	98

82. Have you had any of the following sexual health issues diagnosed by a medical professional in the **last 12 months**? Please circle all the numbers that apply.

Prostatitis	1	Peyronie's disease	6
Epididymitis	2	Phimosis	7
Orchitis	3	Prostate cancer	8
Balanitis	4	Testicular cancer	9
Balanoposthitis	5	None	98

Section Seven: Sexual Functioning

83. Have you **ever** experienced any of the following sexual functioning issues? Please circle all the numbers that apply.

Regular lack of desire or interest for sexual activity	1	Regular inability to ejaculate during masturbation or sexual intercourse	4
Regular avoidance of all or almost all sexual contact with a sexual partner	2	Regular ejaculation with minimal sexual stimulation before or shortly after penetration	5
Regular inability to achieve or maintain an erection until the completion of sexual activity	3	Pain during intercourse	6

84. Have you experienced any of the following sexual functioning issues in the **last 12 months**? Please circle all the numbers that apply.

Regular lack of desire or interest for sexual activity	1	Regular inability to ejaculate during masturbation or sexual intercourse	4
Regular avoidance of all or almost all sexual contact with a sexual partner	2	Regular ejaculation with minimal sexual stimulation before or shortly after penetration	5
Regular inability to achieve or maintain an erection until the completion of sexual activity	3	Pain during intercourse	6

Section Eight: Lifetime Sexual Activity

Masturbation

85. Have you ever masturbated?

Yes	1	→ **Please continue**
No	2	→ **Please go to question 89**

86. How old were you when you first started masturbating? Please specify here:

87. While growing up, did your masturbating behaviour ever result in difficulties between you and your parents or caregivers?

Yes	1
No	2

88. Has your masturbating behaviour **ever** resulted in difficulty between you and a previous or current sexual partner?

Yes	1
No	2

Pornography

89. Have you ever viewed pornography?

Yes	1	→ **Please continue**
No	2	→ **Please go to question 94**

90. Which of the following forms of pornography have you **ever** used? Please circle all that apply.

Magazine	1	Internet	5
Audiotape	2	Telephone	6
Video	3	Pay TV	7
DVD	4	None	98

91. Have you ever viewed pornography with a previous or current sexual partner?

Yes	1
No	2

92. Do you pay for the pornography you view?

Yes	1
No	2
Sometimes	3

93. Has viewing pornography ever resulted in difficulties between you and a previous or current sexual partner?

Yes	1
No	2

Sex Toys

94. Have you ever used a sex toy?

Yes	1	→ **Please continue**
No	2	→ **Please go to question 97**

95. Which of the following sex toys have you ever used? Please circle all that apply.

Dildo	1	Pocket vagina (vibrating)	7
Penis ring	2	Anal beads	8
Vibrator	3	Nipple clamps	9
Bondage restraints (e.g. handcuffs, whips)	4	Blow up doll	10
Pocket vagina (non-vibrating)	5	None	98
Butt plug	6		

96. Has using a sex toy ever resulted in difficulties between you and a previous or current sexual partner?

Yes	1
No	2

Sexual Experiences

97. How many sexual partner(s) have you had in your lifetime? Please circle the numbers that apply.

1-5	6-10	11-15	16-20	21-25	26-30
31-35	36-40	41-45	46-50	51-59	60+

98. Have you **ever** experienced the following? Please circle all the numbers that apply.

Oral Sex	1
Vaginal Sex	2
Anal Sex	3
Group Sex	4
Swinging	5
None of these	98

Section Nine: Variations in Sexual Thoughts and Behaviour

Sexual Appearance

99. Have you ever cut or shaved your pubic hair?

Yes	1
No	2

100. Have you ever had your nipples pierced?

Yes	1
No	2

101. Have you ever had your genitals pierced?

Yes	1
No	2

102. Have you ever used a penis pump to make your penis bigger?

Yes	1
No	2

103. Have you ever used pills to make your penis bigger?

Yes	1
No	2

104. Have you ever had surgery to make your penis bigger?

Yes	1
No	2

105. Are you circumcised?

Yes	1
No	2

106. Have you ever had sex reassignment surgery?

Yes	1
No	2

Sexual Fantasy

Note: for the purposes of this section a sexual fantasy is defined as a sexually arousing thought or mental image.

107. Have you ever had a sexual fantasy of any type?

Yes	1	→ **Please continue**
No	2	→ **Please go to question 111**

108. Have you ever had sexual fantasies involving the following? Please circle all that apply.

A celebrity	1	Pain	12
An authoritative figure (e.g. teacher, lecturer, politician)	2	Being submissive	13
Your partner's sibling	3	Being dominant	14
Your partner's friend	4	Having sex with animals	15
Having sex with inappropriate people (e.g. a family member, a child)	5	Sex in a public place	16
A person in uniform (e.g. police officer, nurse, doctor)	6	Romantic massage	17
Someone younger	7	Someone older	18
Your therapist	8	Being watched while having sex	19
A threesome	9	Being rescued	20
Group sex	10	Forced sexual intercourse	21
Complete stranger	11	None	98

109. Have you ever shared your sexual fantasies with a previous or current sexual partner?

Yes	1
No	2

110. Have your sexual fantasies ever caused any difficulties between you and a previous or current sexual partner?

Yes	1
No	2

Extradyadic Sexual Involvement

111. While with a previous or current primary sexual partner, have you ever had sexual intercourse (includes vaginal, oral, or anal sex) with someone else without your primary sexual partner knowing?

Yes	1
No	2

112. Have you ever found that your previous or current sexual partner was having sexual intercourse (includes vaginal intercourse, oral sex or anal sex) with another person while they were involved in a relationship with you?

Yes	1
No	2

Sexual Curiosity

113. Have you ever become aroused at the thought of a previous or current sexual partner having sexual intercourse with someone else?

Yes	1
No	2

114. Have you ever arranged for a previous or current sexual partner to have sexual intercourse with another person?

Yes	1
No	2

115. Have you ever participated in a threesome?

Yes	1
No	2

116. Have you ever engaged in partner swapping or swinging?

Yes	1
No	2

117. Have you ever had an open relationship? An open relationship in this sense is where you and your partner have agreed that it is ok to be sexually involved with other people while in the relationship.

Yes	1
No	2

118. Have you ever had an open relationship? An open relationship in this sense is where you and your partner have agreed that it is ok to be sexually involved with other people while in the relationship.

Dressed in clothing worn by the opposite sex	1
Inflicted or received pain during sexual activity	2
Needed an inanimate object (e.g. leather, fur) present during sexual activity in order to become sexually excited and achieve an orgasm	3
Performed an act of exhibitionism (e.g. exposing yourself in public or making obscene telephone calls)	4
Secretly observed others engaging in sexual activity	5
Obtained sexual pleasure by rubbing yourself against another non-consenting person	6
None of these	97

Victim of a Sexual Crime

119. While you were a child, did an adult ever force you to engage in sexual activity of any kind?

Yes	1
No	2

If you answered yes, was this reported to the police?

Yes	1
No	2

120. As an adult, have you ever been forced to have sexual intercourse (includes vaginal, oral and anal sex) by another adult? Forced in this situation means that you did not agree to or consent to the sexual intercourse.

Yes	1
No	2

If you answered yes, did you report this event to the police?

Yes	1
No	2

Section Ten: Current Sexual Activity

Masturbation

121. In the last 12 months how often would you say you masturbated?

Did not masturbate	1	→ **Please go to question 128**
Less than once a month	2	→ **All other responses please continue**
Once a month	3	
2-3 times per month	4	
Once per week	5	
2-3 times week	6	
4-6 times week	7	
Once daily	8	
More than once daily	9	
Varied too often to say	10	

122. In the last 12 months how often would you say you felt guilty when you masturbated? Please circle the number that applies.

Never	Rarely	Sometimes	Usually	Always
1	2	3	4	5

123. Thinking about your masturbating behaviour over the last 12 months, which of the following reasons would you usually give for masturbating? Please circle all that apply.

To relieve sexual tension	1
To relax	2
I did not have a sexual partner	3
My sexual partner did not want to have sexual intercourse with me	4
To get to sleep	5
My sexual partner asked me to so that he/she could watch	6
I had nothing else to do	7
Did not have a condom and was not sure of my sexual partner's STI status	8
Other (please specify)	96

124. In the last 12 months how often would you say **you were** masturbated by a sexual partner?

Have not had a sexual partner in the last 12 months	1
Was not masturbated by a sexual partner	2
Less than once a month	3
Once a month	4
2-3 times per month	5
Once per week	6
2-3 times week	7
4-6 times week	8
Once daily	9
More than once daily	10
Varied too often to say	11

125. In the last 12 months how often would you say **you** masturbated a sexual partner?

Have not had a sexual partner in the last 12 months	1
Didn't masturbate a sexual partner	2
Less than once a month	3
Once a month	4
2-3 times per month	5
Once per week	6
2-3 times week	7
4-6 times week	8
Once daily	9
More than once daily	10
Varied too often to say	11

126. In the last 12 months how often would you say you used pornographic material when you masturbated?

Did not use pornographic material when I masturbated	1
Less than once a month	2
Once a month	3
2-3 times per month	4
Once per week	5
2-3 times week	6
4-6 times week	7
Once daily	8
More than once daily	9
Varied too often to say	10

127. In the last 12 months how often would you say you used a sex toy when you masturbated?

Did not use a sex toy	1
Less than once a month	2
Once a month	3
2-3 times per month	4
Once per week	5
2-3 times week	6
4-6 times week	7
Once daily	8
More than once daily	9
Varied too often to say	10

Pornography Use

128. In the last 12 months how often would you say you used pornography?

Did not use pornography	1	→ **Please go to question 132**
Less than once a month	2	→ **All other responses please continue**
Once a month	3	
2-3 times per month	4	
Once per week	5	
2-3 times week	6	
4-6 times week	7	
Once daily	8	
More than once daily	9	
Varied too often to say	10	

129. In the last 12 months how often would you say you felt guilty when you used pornography? Please circle the number that applies.

Never	Rarely	Sometimes	Usually	Always
1	2	3	4	5

130. Thinking about your use of pornography over the last 12 months, which of the following reasons would you usually give for using pornography? Please circle all that apply.

To relieve sexual tension	1
To relax	2
I did not have a sexual partner	3
My sexual partner did not want to have sexual intercourse with me	4
To get to sleep	5
My sexual partner asked me to watch it with them	6
Did not have a condom and was not sure of my sexual partner's STI status	7
I had nothing else to do	8
Other	96

131. In the last 12 months how often would you say you viewed pornography with a sexual partner?

Have not had a sexual partner in the last 12 months	1
Did not view pornography with a sexual partner	2
Less than once a month	3
Once a month	4
2-3 times per month	5
Once per week	6
2-3 times week	7
4-6 times week	8
Once daily	9
More than once daily	10
Varied too often to say	11

Sex Toy Use

132. In the last 12 months how often would you say you used a sex toy **by yourself**?

Did not use a sex toy by myself	1	→ **Please go to question 136**
Less than once a month	2	→ **All other responses please continue**
Once a month	3	
2-3 times per month	4	
Once per week	5	
2-3 times week	6	
4-6 times week	7	
Once daily	8	
More than once daily	9	
Varied too often to say	10	

133. In the last 12 months how often would you say you felt guilty when you used a sex toy? Please circle the number that applies.

Never	Rarely	Sometimes	Usually	Always
1	2	3	4	5

134. Thinking about your sex toy use over the last 12 months, which of the following reasons would you usually give for using a sex toy? Please circle all the numbers that apply.

To relieve sexual tension	1
To relax	2
I did not have a sexual partner	3
My sexual partner did not want to have sexual intercourse with me	4
To get to sleep	5
My sexual partner asked me to so that he/she could watch	6
I had nothing else to do	7
Did not have a condom and was not sure of my sexual partner's STI status	8
Other (please specify)	99

135. In the last 12 months how often would you say you used a sex toy with a sexual partner?

Have not had a sexual partner in the last 12 months	1
Did not use a sex toy with a sexual partner	2
Less than once a month	3
Once a month	4
2-3 times per month	5
Once per week	6
2-3 times week	7
4-6 times week	8
Once daily	9
More than once daily	10
Varied too often to say	11

Sexual Intercourse

136. Have you had vaginal intercourse, oral sex or anal sex in the last 12 months?

Yes	1	→ **Please continue**
No	2	→ **Please go to section 11**

137. How many sexual partners have you had in the last 12 months? Please circle the numbers that apply.

1-3 4-6 7-10 11-15 16+

138. In the last 12 months how often would you say you had vaginal intercourse?

Did not have vaginal intercourse	1
Less than once a month	2
Once a month	3
2-3 times per month	4
Once per week	5
2-3 times week	6
4-6 times week	7
Once daily	8
More than once daily	9

139. In the last 12 months how often would you say you have received oral sex?

Did not receive oral sex	1
Less than once a month	2
Once a month	3
2-3 times per month	4
Once per week	5
2-3 times week	6
4-6 times week	7
Once daily	8
More than once daily	9

140. In the last 12 months how often would you say you have given oral sex?

Did not give oral sex	1
Less than once a month	2
Once a month	3
2-3 times per month	4
Once per week	5
2-3 times week	6
4-6 times week	7
Once daily	8
More than once daily	9

141. In the last 12 months how often would you say you had anal sex where you were the receiver?

Did not have anal sex where I was the receiver	1
Less than once per week	2
1-3 times per week	3
4-5 times per week	4
Once daily	5
More than once daily	6

142. In the last 12 months how often would you say you had anal sex where you were the giver (e.g. through the use of a strap-on dildo)?

Did not have anal sex where I was the giver	1
Less than once per week	2
1-3 times per week	3
4-5 times per week	4
Once daily	5
More than once daily	6

143. In the last 12 months how often have you used protection against sexually transmitted infections (STIs) when having sexual intercourse?

Always	Usually	Sometimes	Rarely	Never	Doesn't Apply
1	2	3	4	5	6

144. In the last 12 months how often would you say you and your sexual partner(s) used contraception to avoid pregnancy?

Always	Usually	Sometimes	Rarely	Never
1	2	3	4	5

145. In the last 12 months how often would you say you usually spent on acts of foreplay?

0-5 minutes	6-10 minutes	11-20 minutes	21-29 minutes	30 + minutes
1	2	3	4	5

146. In the last 12 months how often would you say **you** achieved an orgasm when having sexual intercourse?

Always	Usually	Sometimes	Rarely	Never
1	2	3	4	5

147. In the last 12 months how often would you say **your sexual partner(s)** achieved an orgasm when having sexual intercourse?

Always	Usually	Sometimes	Rarely	Never
1	2	3	4	5

148. In the last 12 months how often would you say **you** faked an orgasm?

Always	Usually	Sometimes	Rarely	Never
1	2	3	4	5

149. In the last 12 months how often would you say **your sexual partner(s)** faked an orgasm?

Always	Usually	Sometimes	Rarely	Never
1	2	3	4	5

150. In the last 12 months have you had a one-night stand?

Yes	1
No	2

If you answered yes, please indicate how many by placing a tick in the appropriate box below.

One	Two	Three	Four	Five or more
1	2	3	4	5

151. In the last 12 months have you turned down the opportunity to have sexual intercourse with someone who was not your primary sexual partner?

Yes	1
No	2

If you answered yes, please identify which of the following indicates why? Please circle all that apply.

We did not have any condoms	1
It was the first time we had met	2
I only have sex with a person only when I truly know them	3
I was not in the mood	4
I did not find the person attractive enough	5
I had doubts about their sexual health status	6
I was already involved with someone	7
I knew that he/she was already involved with another person	8
Other (please specify):	99

152. In the last 12 months have you had sexual intercourse with a person who was not your primary sexual partner?

Yes	1
No	2

153. In the last 12 months have you agreed to unwanted sexual activity or sexual intercourse with a current or previous sexual partner?

Yes	1
No	2

If you answered yes, which of the following best describes why? Please circle the number that applies.

Satisfy sexual partner's needs to enhance intimacy	1
Avoid relationship tension and conflict	2
Felt obligated because of previous sexual history with this person	3
It was usual in the relationship to engage in sex regularly	4
Unable to say no	5
Other (please specify):	6

154. In the last 12 months have you had sexual intercourse with a prostitute?

Yes	1
No	2

If you answered yes, please indicate the number of times. Please circle the appropriate number below.

One	Two	Three	Four	Five or more
1	2	3	4	5

155. In the last 12 months how often would you say you had sexual intercourse with someone of the **same** sex?

Didn't have sexual intercourse with someone of the same sex	1
Less than once a month	2
Once a month	3
2-3 times per month	4
Once per week	5
2-3 times week	6
4-6 times week	7
Once daily	8
More than once daily	9
Varied too often to say	10

Section Eleven: Survey Feedback

Did you like doing this survey? Please circle one.

Yes No

Overall, were the questions in this survey easy or hard to understand? Please circle one below.

Easy Hard

What did you think about the length of the survey? Please circle one below.

Too short About right Too long